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<110> BayerHealthcare AG

<120> METHODS AND KITS FOR INVESTIGATING CANCER

<130> BHC-0301001-fc

<150> EP 03022587.4

<151> 2003-10-06

<160> 571

<170> PatentIn version 3.1

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<210> 22

<211> 1530

<212> DNA

<213> Homo sapiens

<400> 22

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<212> DNA

<213> Homo sapiens

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<210> 24

<211> 4237

<212> DNA

<213> Homo sapiens

<400> 24

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<211> 890

<212> DNA

<213> Homo sapiens

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<211> 2099

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 27

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<212> DNA

<213> Homo sapiens

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2904

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<213> Homo sapiens

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<211> 2756

<212> DNA

<213> Homo sapiens

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<210> 45

<211> 2058

<212> DNA

<213> Homo sapiens

<400> 45

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<210> 46

<211> 2538

<212> DNA

<213> Homo sapiens

<400> 46

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<210> 47

<211> 540

<212> DNA

<213> Homo sapiens

<400> 47

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<210> 48

<211> 2254

<212> DNA

<213> Homo sapiens

<400> 48

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<210> 49

<211> 1994

<212> DNA

<213> Homo sapiens

<400> 49

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<211> 1599

<212> DNA

<213> Homo sapiens

<400> 50

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<210> 51
 <211> 6450
 <212> DNA
 <213> Homo sapiens
 <400> 51

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<212> DNA

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<400> 59

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<211> 1789

<212> DNA

<213> Homo sapiens

<400> 60

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<211> 3164

<212> DNA

<213> Homo sapiens

<400> 61

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<211> 1121

<212> DNA

<213> Homo sapiens

<400> 62

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<212> DNA

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<211> 2668

<212> DNA

<213> Homo sapiens

<400> 64

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<211> 5003

<212> DNA

<213> Homo sapiens

<400> 65

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<212> DNA

<213> Homo sapiens

<400> 66

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<211> 5426

<212> DNA

<213> Homo sapiens

<400> 67

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<211> 1658

<212> DNA

<213> Homo sapiens

<400> 74

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<211> 2444

<212> DNA

<213> Homo sapiens

<400> 75

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<211> 3263

<212> DNA

<213> Homo sapiens

<400> 76

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<211> 6452

<212> DNA

<213> Homo sapiens

<400> 77

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<211> 2907

<212> DNA

<213> Homo sapiens

<400> 80

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<210> 81

<211> 2398

<212> DNA

<213> Homo sapiens

<400> 81

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<210> 82

<211> 2197

<212> DNA

<213> Homo sapiens

<400> 82

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<210> 83

<211> 2201

<212> DNA

<213> Homo sapiens

<400> 83

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<211> 1233

<212> DNA

<213> Homo sapiens

<400> 84

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<211> 3139

<212> DNA

<213> Homo sapiens

<400> 85

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<211> 1865

<212> DNA

<213> Homo sapiens

<400> 96

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<212> DNA

<213> Homo sapiens

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<211> 592

<212> DNA

<213> Homo sapiens

<400> 98

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<211> 3275

<212> DNA

<213> Homo sapiens

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<211> 2399

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<211> 3187

<212> DNA

<213> Homo sapiens

<400> 121

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<211> 1992

<212> DNA

<213> Homo sapiens

<400> 122

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<211> 942

<212> DNA

<213> Homo sapiens

<400> 123

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<211> 1424

<212> DNA

<213> Homo sapiens

<400> 125

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<211> 2836

<212> DNA

<213> Homo sapiens

<400> 126

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<211> 1677

<212> DNA

<213> Homo sapiens

<400> 127

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<210> 128

<211> 3837

<212> DNA

<213> Homo sapiens

<400> 128

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<211> 4020

<212> DNA

<213> Homo sapiens

<400> 129

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<211> 4348

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 133

<211> 2087

<212> DNA

<213> Homo sapiens

<400> 133

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<210> 134

<211> 1401

<212> DNA

<213> Homo sapiens

<400> 134

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<210> 135

<211> 3737

<212> DNA

<213> Homo sapiens

<400> 135

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<210> 136

<211> 2477

<212> DNA

<213> Homo sapiens

<400> 136

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<211> 1341

<212> DNA

<213> Homo sapiens

<400> 137

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<210> 138

<211> 2449

<212> DNA

<213> Homo sapiens

<400> 138

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<210> 139

<211> 2175

<212> DNA

<213> Homo sapiens

<400> 139

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<210> 140

<211> 1834

<212> DNA

<213> Homo sapiens

<400> 140

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<210> 141

<211> 1286

<212> DNA

<213> Homo sapiens

<400> 141

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<210> 142

<211> 4166

<212> DNA

<213> Homo sapiens

<400> 142

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<400> 144

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 <211> 1973
 <212> DNA
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 <400> 159

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<211> 2722

<212> DNA

<213> Homo sapiens

<400> 160

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<210> 161

<211> 2208

<212> DNA

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aagcaaaaag	cctggatgac	atgtttgaa	caagcacttt	gtctgatggg	caagctattg	8460
cagaccaaag	tgaaataata	ccaacattgg	gccaatttga	aaggactcag	gaggagtatg	8520
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cattagtaga	ccatactccc	tatctaagta	ttgctactac	ccaccttatg	gatcagagtg	8640
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tagcagtttc	aacatttgcg	aagttgtctt	ctcagacacc	atcatctccc	ctcactatct	8760
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aagtggcagc	gagaattctt	gattccaatg	atcaggcaac	agtaaaccct	gtggaattta	9420
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agaatggcca	gtggaatgat	gttccctgca	attaccatct	cacctatagc	tgcaagaaag	10140
gaacagttgc	tggcggccag	ccccctgttg	tagaaaatgc	caagaccttt	ggaaagatga	10200
aacctcggtta	tgaaatcaac	tccctgatta	gataccactg	caaagatggt	ttcattcaac	10260
gtcaccttcc	aactatccgg	tgcttaggaa	attggaagatg	ggctatacct	aaaattacct	10320
gcatgaaccc	atctgcatac	caaaggactt	attctatgaa	atactttaaa	aattcctcat	10380
cagcaaaagga	caattcaata	aatacatcca	aacatgatca	tcgttggagc	cggaggtggc	10440
aggagtcgag	gcgctgatcc	ctaaaatggc	gaacatgtgt	tttcatcatt	tcagccaaag	10500
tcctaacttc	ctgtgccttt	cctatcacct	cgagaagtaa	ttatcagttg	gtttggattt	10560

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ttggaccacc gttcagtcac tttggggttgc cgtgctccca aaacatttta aatgaaagta 10620
ttggcattca aaaagacagc agacaaaatg aaagaaaatg agagcagaaa gtaagcattt 10680
ccagcctatc taatttcttt agttttctat ttgcctccag tgcagtccat ttcctaattg 10740
ataccagcct actgtactat ttaaaatgct caatttcagc accgatggcc atgtaataaa 10800
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ggtgcagttt gcttctacat gatgctaaag gctgcgaatg ggatcctgat ggaactaagg 11100
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<210> 166

<211> 339

<212> PRT

<213> Homo sapiens

<400> 166

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Met Trp Gln Leu Trp Ala Ser Leu Cys Cys Leu Leu Val Leu Ala Asn
1      5      10      15
Ala Arg Ser Arg Pro Ser Phe His Pro Leu Ser Asp Glu Leu Val Asn
20     25     30
Tyr Val Asn Lys Arg Asn Thr Thr Trp Gln Ala Gly His Asn Phe Tyr
35     40     45
Asn Val Asp Met Ser Tyr Leu Lys Arg Leu Cys Gly Thr Phe Leu Gly
50     55     60
Gly Pro Lys Pro Pro Gln Arg Val Met Phe Thr Glu Asp Leu Lys Leu
65     70     75     80
Pro Ala Ser Phe Asp Ala Arg Glu Gln Trp Pro Gln Cys Pro Thr Ile
85     90     95
Lys Glu Ile Arg Asp Gln Gly Ser Cys Gly Ser Cys Trp Ala Phe Gly
100    105    110
Ala Val Glu Ala Ile Ser Asp Arg Ile Cys Ile His Thr Asn Ala His
115    120    125
Val Ser Val Glu Val Ser Ala Glu Asp Leu Leu Thr Cys Cys Gly Ser
130    135    140
Met Cys Gly Asp Gly Cys Asn Gly Gly Tyr Pro Ala Glu Ala Trp Asn
145    150    155    160
Phe Trp Thr Arg Lys Gly Leu Val Ser Gly Gly Leu Tyr Glu Ser His
165    170    175
Val Gly Cys Arg Pro Tyr Ser Ile Pro Pro Cys Glu His His Val Asn
180    185    190
Gly Ser Arg Pro Pro Cys Thr Gly Glu Gly Asp Thr Pro Lys Cys Ser
195    200    205
Lys Ile Cys Glu Pro Gly Tyr Ser Pro Thr Tyr Lys Gln Asp Lys His
210    215    220
Tyr Gly Tyr Asn Ser Tyr Ser Val Ser Asn Ser Glu Lys Asp Ile Met
225    230    235    240
Ala Glu Ile Tyr Lys Asn Gly Pro Val Glu Gly Ala Phe Ser Val Tyr
245    250    255
Ser Asp Phe Leu Leu Tyr Lys Ser Gly Val Tyr Gln His Val Thr Gly
260    265    270
Glu Met Met Gly Gly His Ala Ile Arg Ile Leu Gly Trp Gly Val Glu
275    280    285
Asn Gly Thr Pro Tyr Trp Leu Val Ala Asn Ser Trp Asn Thr Asp Trp
290    295    300
Gly Asp Asn Gly Phe Phe Lys Ile Leu Arg Gly Gln Asp His Cys Gly
305    310    315    320
Ile Glu Ser Glu Val Val Ala Gly Ile Pro Arg Thr Asp Gln Tyr Trp
325    330    335
Glu Lys Ile

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<210> 167

<211> 286

<212> PRT

<213> Homo sapiens

<400> 167

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Met Arg Leu Leu Pro Arg Leu Leu Leu Leu Leu Leu Val Phe Pro
1      5      10      15

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Ala Thr Val Leu Phe Arg Gly Gly Pro Arg Gly Ser Leu Ala Val Ala
 20 25 30
 Gln Asp Leu Thr Glu Asp Glu Glu Thr Val Glu Asp Ser Ile Ile Glu
 35 40 45
 Asp Glu Asp Asp Glu Ala Glu Val Glu Glu Asp Glu Pro Thr Asp Leu
 50 55 60
 Val Glu Asp Lys Glu Glu Glu Asp Val Ser Gly Glu Pro Glu Ala Ser
 65 70 75 80
 Pro Ser Ala Asp Thr Thr Ile Leu Phe Val Lys Gly Glu Asp Phe Pro
 85 90 95
 Ala Asn Asn Ile Val Lys Phe Leu Val Gly Phe Thr Asn Lys Gly Thr
 100 105 110
 Glu Asp Phe Ile Val Glu Ser Leu Asp Ala Ser Phe Arg Tyr Pro Gln
 115 120 125
 Asp His Gln Phe Tyr Ile Gln Asn Phe Thr Ala Leu Pro Leu Asn Thr
 130 135 140
 Val Val Pro Pro Gln Arg Gln Ala Thr Phe Glu Tyr Ser Phe Ile Pro
 145 150 155 160
 Ala Glu Pro Met Gly Gly Arg Pro Phe Gly Leu Val Ile Asn Leu Asn
 165 170 175
 Tyr Lys Asp Leu Asn Gly Asn Val Phe Gln Asp Ala Val Phe Asn Gln
 180 185 190
 Thr Val Thr Val Ile Glu Arg Glu Asp Gly Leu Asp Gly Glu Thr Ile
 195 200 205
 Phe Met Tyr Met Phe Leu Ala Gly Leu Gly Leu Leu Val Ile Val Gly
 210 215 220
 Leu His Gln Leu Leu Glu Ser Arg Lys Arg Lys Arg Pro Ile Gln Lys
 225 230 235 240
 Val Glu Met Gly Thr Ser Ser Gln Asn Asp Val Asp Met Ser Trp Ile
 245 250 255
 Pro Gln Glu Thr Leu Asn Gln Ile Asn Lys Ala Ser Pro Arg Arg Leu
 260 265 270
 Pro Arg Lys Arg Ala Gln Lys Arg Ser Val Gly Ser Asp Glu
 275 280 285

<210> 168

<211> 433

<212> PRT

<213> Homo sapiens

<400> 168

Met Pro Asp Tyr Leu Gly Ala Asp Gln Arg Lys Thr Lys Glu Asp Glu
 1 5 10 15
 Lys Asp Asp Lys Pro Ile Arg Ala Leu Asp Glu Gly Asp Ile Ala Leu
 20 25 30
 Leu Lys Thr Tyr Gly Gln Ser Thr Tyr Ser Arg Gln Ile Lys Gln Val
 35 40 45
 Glu Asp Asp Ile Gln Gln Leu Leu Lys Lys Ile Asn Glu Leu Thr Gly
 50 55 60
 Ile Lys Glu Ser Asp Thr Gly Leu Ala Pro Pro Ala Leu Trp Asp Leu
 65 70 75 80
 Ala Ala Asp Lys Gln Thr Leu Gln Ser Glu Gln Pro Leu Gln Val Ala
 85 90 95
 Arg Cys Thr Lys Ile Ile Asn Ala Asp Ser Glu Asp Pro Lys Tyr Ile
 100 105 110
 Ile Asn Val Lys Gln Phe Ala Lys Phe Val Val Asp Leu Ser Asp Gln
 115 120 125
 Val Ala Pro Thr Asp Ile Glu Glu Gly Met Arg Val Gly Val Asp Arg
 130 135 140
 Asn Lys Tyr Gln Ile His Ile Pro Leu Pro Pro Lys Ile Asp Pro Thr
 145 150 155 160
 Val Thr Met Met Gln Val Glu Glu Lys Pro Asp Val Thr Tyr Ser Asp
 165 170 175
 Val Gly Gly Cys Lys Glu Gln Ile Glu Lys Leu Arg Glu Val Val Glu
 180 185 190
 Thr Pro Leu Leu His Pro Glu Arg Phe Val Asn Leu Gly Ile Glu Pro
 195 200 205
 Pro Lys Gly Val Leu Leu Phe Gly Pro Pro Gly Thr Gly Lys Thr Leu
 210 215 220
 Cys Ala Arg Ala Val Ala Asn Arg Thr Asp Ala Cys Phe Ile Arg Val

225	Ile	Gly	Ser	Glu	Leu	Val	Gln	Lys	Tyr	Val	Gly	Glu	Gly	Ala	Arg	Met
					245					250						255
	Val	Arg	Glu	Leu	Phe	Glu	Met	Ala	Arg	Thr	Lys	Lys	Ala	Cys	Leu	Ile
				260					265							270
	Phe	Phe	Asp	Glu	Ile	Asp	Ala	Ile	Gly	Gly	Ala	Arg	Phe	Asp	Asp	Gly
			275					280					285			
	Ala	Gly	Gly	Asp	Asn	Glu	Val	Gln	Arg	Thr	Met	Leu	Glu	Leu	Ile	Asn
			290				295					300				
	Gln	Leu	Asp	Gly	Phe	Asp	Pro	Arg	Gly	Asn	Ile	Lys	Val	Leu	Met	Ala
305					310						315					320
	Thr	Asn	Arg	Pro	Asp	Thr	Leu	Asp	Pro	Ala	Leu	Met	Arg	Pro	Gly	Arg
				325					330						335	
	Leu	Asp	Arg	Lys	Ile	Glu	Phe	Ser	Leu	Pro	Asp	Leu	Glu	Gly	Arg	Thr
			340						345					350		
	His	Ile	Phe	Lys	Ile	His	Ala	Arg	Ser	Met	Ser	Val	Glu	Arg	Asp	Ile
			355				360						365			
	Arg	Phe	Glu	Leu	Leu	Ala	Arg	Leu	Cys	Pro	Asn	Ser	Thr	Gly	Ala	Glu
			370			375					380					
	Ile	Arg	Ser	Val	Cys	Thr	Glu	Ala	Gly	Met	Phe	Ala	Ile	Arg	Ala	Arg
385					390						395					400
	Arg	Lys	Ile	Ala	Thr	Glu	Lys	Asp	Phe	Leu	Glu	Ala	Val	Asn	Lys	Val
				405					410						415	
	Ile	Lys	Ser	Tyr	Ala	Lys	Phe	Ser	Ala	Thr	Pro	Arg	Tyr	Met	Thr	Tyr
			420					425						430		
	Asn															

<210> 169

<211> 529

<212> PRT

<213> Homo sapiens

<400> 169

Met	Ser	Thr	Asn	Glu	Asn	Ala	Asn	Thr	Pro	Ala	Ala	Arg	Leu	His	Arg
1				5					10					15	
Phe	Lys	Asn	Lys	Gly	Lys	Asp	Ser	Thr	Glu	Met	Arg	Arg	Arg	Arg	Ile
			20					25					30		
Glu	Val	Asn	Val	Glu	Leu	Arg	Lys	Ala	Lys	Lys	Asp	Asp	Gln	Met	Leu
			35				40					45			
Lys	Arg	Arg	Asn	Val	Ser	Ser	Phe	Pro	Asp	Asp	Ala	Thr	Ser	Pro	Leu
			50			55					60				
Gln	Glu	Asn	Arg	Asn	Asn	Gln	Gly	Thr	Val	Asn	Trp	Ser	Val	Asp	Asp
65				70					75						80
Ile	Val	Lys	Gly	Ile	Asn	Ser	Ser	Asn	Val	Glu	Asn	Gln	Leu	Gln	Ala
			85					90					95		
Thr	Gln	Ala	Ala	Arg	Lys	Leu	Leu	Ser	Arg	Glu	Lys	Gln	Pro	Pro	Ile
			100					105					110		
Asp	Asn	Ile	Ile	Arg	Ala	Gly	Leu	Ile	Pro	Lys	Phe	Val	Ser	Phe	Leu
			115				120					125			
Gly	Arg	Thr	Asp	Cys	Ser	Pro	Ile	Gln	Phe	Glu	Ser	Ala	Trp	Ala	Leu
			130			135					140				
Thr	Asn	Ile	Ala	Ser	Gly	Thr	Ser	Glu	Gln	Thr	Lys	Ala	Val	Val	Asp
145				150						155					160
Gly	Gly	Ala	Ile	Pro	Ala	Phe	Ile	Ser	Leu	Leu	Ala	Ser	Pro	His	Ala
			165					170						175	
His	Ile	Ser	Glu	Gln	Ala	Val	Trp	Ala	Leu	Gly	Asn	Ile	Ala	Gly	Asp
			180					185					190		
Gly	Ser	Val	Phe	Arg	Asp	Leu	Val	Ile	Lys	Tyr	Gly	Ala	Val	Asp	Pro
			195				200					205			
Leu	Leu	Ala	Leu	Leu	Ala	Val	Pro	Asp	Met	Ser	Ser	Leu	Ala	Cys	Gly
			210			215					220				
Tyr	Leu	Arg	Asn	Leu	Thr	Trp	Thr	Leu	Ser	Asn	Leu	Cys	Arg	Asn	Lys
225					230					235					240
Asn	Pro	Ala	Pro	Pro	Ile	Asp	Ala	Val	Glu	Gln	Ile	Leu	Pro	Thr	Leu
			245						250					255	
Val	Arg	Leu	Leu	His	His	Asp	Asp	Pro	Glu	Val	Leu	Ala	Asp	Thr	Cys
			260					265					270		
Trp	Ala	Ile	Ser	Tyr	Leu	Thr	Asp	Gly	Pro	Asn	Glu	Arg	Ile	Gly	Met
			275				280					285			

Val Val Lys Thr Gly Val Val Pro Gln Leu Val Lys Leu Leu Gly Ala
 290 295 300
 Ser Glu Leu Pro Ile Val Thr Pro Ala Leu Arg Ala Ile Gly Asn Ile
 305 310 315 320
 Val Thr Gly Thr Asp Glu Gln Thr Gln Val Val Ile Asp Ala Gly Ala
 325 330 335
 Leu Ala Val Phe Pro Ser Leu Leu Thr Asn Pro Lys Thr Asn Ile Gln
 340 345 350
 Lys Glu Ala Thr Trp Thr Met Ser Asn Ile Thr Ala Gly Arg Gln Asp
 355 360 365
 Gln Ile Gln Gln Val Val Asn His Gly Leu Val Pro Phe Leu Val Ser
 370 375 380
 Val Leu Ser Lys Ala Asp Phe Lys Thr Gln Lys Glu Ala Val Trp Ala
 385 390 395 400
 Val Thr Asn Tyr Thr Ser Gly Gly Thr Val Glu Gln Ile Val Tyr Leu
 405 410 415
 Val His Cys Gly Ile Ile Glu Pro Leu Met Asn Leu Leu Thr Ala Lys
 420 425 430
 Asp Thr Lys Ile Ile Leu Val Ile Leu Asp Ala Ile Ser Asn Ile Phe
 435 440 445
 Gln Ala Ala Glu Lys Leu Gly Glu Thr Glu Lys Leu Ser Ile Met Ile
 450 455 460
 Glu Glu Cys Gly Gly Leu Asp Lys Ile Glu Ala Leu Gln Asn His Glu
 465 470 475 480
 Asn Glu Ser Val Tyr Lys Ala Ser Leu Ser Leu Ile Glu Lys Tyr Phe
 485 490 495
 Ser Val Glu Glu Glu Glu Asp Gln Asn Val Val Pro Glu Thr Thr Ser
 500 505 510
 Glu Gly Tyr Thr Phe Gln Val Gln Asp Gly Ala Pro Gly Thr Phe Asn
 515 520 525
 Phe

<210> 170
 <211> 971
 <212> PRT
 <213> Homo sapiens
 <400> 170

Met Glu Leu Ser Asp Ala Asn Leu Gln Thr Leu Thr Glu Tyr Leu Lys
 1 5 10 15
 Lys Thr Leu Asp Pro Asp Pro Ala Ile Arg Arg Pro Ala Glu Lys Phe
 20 25 30
 Leu Glu Ser Val Glu Gly Asn Gln Asn Tyr Pro Leu Leu Leu Leu Thr
 35 40 45
 Leu Leu Glu Lys Ser Gln Asp Asn Val Ile Lys Val Cys Ala Ser Val
 50 55 60
 Thr Phe Lys Asn Tyr Ile Lys Arg Asn Trp Arg Ile Val Glu Asp Glu
 65 70 75 80
 Pro Asn Lys Ile Cys Glu Ala Asp Arg Val Ala Ile Lys Ala Asn Ile
 85 90 95
 Val His Leu Met Leu Ser Ser Pro Glu Gln Ile Gln Lys Gln Leu Ser
 100 105 110
 Asp Ala Ile Ser Ile Ile Gly Arg Glu Asp Phe Pro Gln Lys Trp Pro
 115 120 125
 Asp Leu Leu Thr Glu Met Val Asn Arg Phe Gln Ser Gly Asp Phe His
 130 135 140
 Val Ile Asn Gly Val Leu Arg Thr Ala His Ser Leu Phe Lys Arg Tyr
 145 150 155 160
 Arg His Glu Phe Lys Ser Asn Glu Leu Trp Thr Glu Ile Lys Leu Val
 165 170 175
 Leu Asp Ala Phe Ala Leu Pro Leu Thr Asn Leu Phe Lys Ala Thr Ile
 180 185 190
 Glu Leu Cys Ser Thr His Ala Asn Asp Ala Ser Ala Leu Arg Ile Leu
 195 200 205
 Phe Ser Ser Leu Ile Leu Ile Ser Lys Leu Phe Tyr Ser Leu Asn Phe
 210 215 220
 Gln Asp Leu Pro Glu Phe Phe Glu Asp Asn Met Glu Thr Trp Met Asn
 225 230 235 240
 Asn Phe His Thr Leu Leu Thr Leu Asp Asn Lys Leu Leu Gln Thr Asp

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<210> 171
<211> 184
<212> PRT
<213> Homo sapiens
<400> 171
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<210> 172
<211> 514
<212> PRT
<213> Homo sapiens
<400> 172
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	Met	Ala	Asp	Ala	Glu	Val	Ile	Ile	Leu	Pro	Lys	Lys	His	Lys	Lys	Lys
1					5					10					15	
	Lys	Glu	Arg	Lys	Ser	Leu	Pro	Glu	Glu	Asp	Val	Ala	Glu	Ile	Gln	His
				20					25					30		
	Ala	Glu	Glu	Phe	Leu	Ile	Lys	Pro	Glu	Ser	Lys	Val	Ala	Lys	Leu	Asp
				35				40					45			
	Thr	Ser	Gln	Trp	Pro	Leu	Leu	Leu	Lys	Asn	Phe	Asp	Lys	Leu	Asn	Val
						55						60				
	Arg	Thr	Thr	His	Tyr	Thr	Pro	Leu	Ala	Cys	Gly	Ser	Asn	Pro	Leu	Lys
	65				70						75					
	Arg	Glu	Ile	Gly	Asp	Tyr	Ile	Arg	Thr	Gly	Phe	Ile	Asn	Leu	Asp	Lys

85 90 95
 Pro Ser Asn Pro Ser Ser His Glu Val Val Ala Trp Ile Arg Arg Ile
 100 105 110
 Leu Arg Val Glu Lys Thr Gly His Ser Gly Thr Leu Asp Pro Lys Val
 115 120 125
 Thr Gly Cys Leu Ile Val Cys Ile Glu Arg Ala Thr Arg Leu Val Lys
 130 135 140
 Ser Gln Gln Ser Ala Gly Lys Glu Tyr Val Gly Ile Val Arg Leu His
 145 150 155 160
 Asn Ala Ile Glu Gly Thr Gln Leu Ser Arg Ala Leu Glu Thr Leu
 165 170 175
 Thr Gly Ala Leu Phe Gln Arg Pro Pro Leu Ile Ala Ala Val Lys Arg
 180 185 190
 Gln Leu Arg Val Arg Thr Ile Tyr Glu Ser Lys Met Ile Glu Tyr Asp
 195 200 205
 Pro Glu Arg Arg Leu Gly Ile Phe Trp Val Ser Cys Glu Ala Gly Thr
 210 215 220
 Tyr Ile Arg Thr Leu Cys Val His Leu Gly Leu Leu Leu Gly Val Gly
 225 230 235 240
 Gly Gln Met Gln Glu Arg Arg Val Arg Ser Gly Val Met Ser Glu
 245 250 255
 Lys Asp His Met Val Thr Met His Asp Val Leu Asp Ala Gln Trp Leu
 260 265 270
 Tyr Asp Asn His Lys Asp Glu Ser Tyr Leu Arg Arg Val Val Tyr Pro
 275 280 285
 Leu Glu Lys Leu Leu Thr Ser His Lys Arg Leu Val Met Lys Asp Ser
 290 295 300
 Ala Val Asn Ala Ile Cys Tyr Gly Ala Lys Ile Met Leu Pro Gly Val
 305 310 315 320
 Leu Arg Tyr Glu Asp Gly Ile Glu Val Asn Gln Glu Ile Val Val Ile
 325 330 335
 Thr Thr Lys Gly Glu Ala Ile Cys Met Ala Ile Ala Leu Met Thr Thr
 340 345 350
 Ala Val Ile Ser Thr Cys Asp His Gly Ile Val Ala Lys Ile Lys Arg
 355 360 365
 Val Ile Met Glu Arg Asp Thr Tyr Pro Arg Lys Trp Gly Leu Gly Pro
 370 375 380
 Lys Ala Ser Gln Lys Lys Leu Met Ile Lys Gln Gly Leu Leu Asp Lys
 385 390 395 400
 His Gly Lys Pro Thr Asp Ser Thr Pro Ala Thr Trp Lys Gln Glu Tyr
 405 410 415
 Val Asp Tyr Ser Glu Ser Ala Lys Lys Glu Val Val Ala Glu Val Val
 420 425 430
 Lys Ala Pro Gln Val Val Ala Glu Ala Ala Lys Thr Ala Lys Arg Lys
 435 440 445
 Arg Glu Ser Glu Ser Glu Ser Asp Glu Thr Pro Pro Ala Ala Pro Gln
 450 455 460
 Leu Ile Lys Lys Glu Lys Lys Lys Ser Lys Lys Asp Lys Lys Ala Lys
 465 470 475 480
 Ala Gly Leu Glu Ser Gly Ala Glu Pro Gly Asp Gly Asp Ser Asp Thr
 485 490 495
 Thr Lys Lys Lys Lys Lys Lys Lys Ala Lys Glu Val Glu Leu Val
 500 505 510
 Ser Glu

<210> 173

<211> 258

<212> PRT

<213> Homo sapiens

<400> 173

Met Leu Pro Leu Cys Leu Val Ala Ala Leu Leu Leu Ala Ala Gly Pro
 1 5 10 15
 Gly Pro Ser Leu Gly Asp Glu Ala Ile His Cys Pro Pro Cys Ser Glu
 20 25 30
 Glu Lys Leu Ala Arg Cys Arg Pro Pro Val Gly Cys Glu Glu Leu Val
 35 40 45
 Arg Glu Ala Gly Cys Gly Cys Cys Ala Thr Cys Ala Leu Gly Leu Gly
 50 55 60

Met Pro Cys Gly Val Tyr Thr Pro Arg Cys Gly Ser Gly Leu Arg Cys
 65 70 75 80
 Tyr Pro Pro Arg Gly Val Glu Lys Pro Leu His Thr Leu Met His Gly
 85 90 95
 Gln Gly Val Cys Met Glu Leu Ala Glu Ile Glu Ala Ile Gln Glu Ser
 100 105 110
 Leu Gln Pro Ser Asp Lys Asp Glu Gly Asp His Pro Asn Asn Ser Phe
 115 120 125
 Ser Pro Cys Ser Ala His Asp Arg Arg Cys Leu Gln Lys His Phe Ala
 130 135 140
 Lys Ile Arg Asp Arg Ser Thr Ser Gly Gly Lys Met Lys Val Asn Gly
 145 150 155 160
 Ala Pro Arg Glu Asp Ala Arg Pro Val Pro Gln Gly Ser Cys Gln Ser
 165 170 175
 Glu Leu His Arg Ala Leu Glu Arg Leu Ala Ala Ser Gln Ser Arg Thr
 180 185 190
 His Glu Asp Leu Tyr Phe Ile Pro Ile Pro Asn Cys Asp Arg Asn Gly
 195 200 205
 Asn Phe His Pro Lys Gln Cys His Pro Ala Leu Asp Gly Gln Arg Gly
 210 215 220
 Lys Cys Trp Cys Val Asp Arg Lys Thr Gly Val Lys Leu Pro Gly Gly
 225 230 235 240
 Leu Glu Pro Lys Gly Glu Leu Asp Cys His Gln Leu Ala Asp Ser Phe
 245 250 255
 Arg Glu

<210> 174
 <211> 1233
 <212> PRT
 <213> Homo sapiens
 <400> 174

Met Gly Phe Leu Lys Leu Ile Glu Ile Glu Asn Phe Lys Ser Tyr Lys
 1 5 10 15
 Gly Arg Gln Ile Ile Gly Pro Phe Gln Arg Phe Thr Ala Ile Ile Gly
 20 25 30
 Pro Asn Gly Ser Gly Lys Ser Asn Leu Met Asp Ala Ile Ser Phe Val
 35 40 45
 Leu Gly Glu Lys Thr Ser Asn Leu Arg Val Lys Thr Leu Arg Asp Leu
 50 55 60
 Ile His Gly Ala Pro Val Gly Lys Pro Ala Ala Asn Arg Ala Phe Val
 65 70 75 80
 Ser Met Val Tyr Ser Glu Glu Gly Ala Glu Asp Arg Thr Phe Ala Arg
 85 90 95
 Val Ile Val Gly Gly Ser Ser Glu Tyr Lys Ile Asn Asn Lys Val Val
 100 105 110
 Gln Leu His Glu Tyr Ser Glu Glu Leu Glu Lys Leu Gly Ile Leu Ile
 115 120 125
 Lys Ala Arg Asn Phe Leu Val Phe Gln Gly Ala Val Glu Ser Ile Ala
 130 135 140
 Met Lys Asn Pro Lys Glu Arg Thr Ala Leu Phe Glu Glu Ile Ser Arg
 145 150 155 160
 Ser Gly Glu Leu Ala Gln Glu Tyr Asp Lys Arg Lys Lys Glu Met Val
 165 170 175
 Lys Ala Glu Glu Asp Thr Gln Phe Asn Tyr His Arg Lys Lys Asn Ile
 180 185 190
 Ala Ala Glu Arg Lys Glu Ala Lys Gln Glu Lys Glu Glu Ala Asp Arg
 195 200 205
 Tyr Gln Arg Leu Lys Asp Glu Val Val Arg Ala Gln Val Gln Leu Gln
 210 215 220
 Leu Phe Lys Leu Tyr His Asn Glu Val Glu Ile Glu Lys Leu Asn Lys
 225 230 235 240
 Glu Leu Ala Ser Lys Asn Lys Glu Ile Glu Lys Asp Lys Lys Arg Met
 245 250 255
 Asp Lys Val Glu Asp Glu Leu Lys Glu Lys Lys Lys Glu Leu Gly Lys
 260 265 270
 Met Met Arg Glu Gln Gln Gln Ile Glu Lys Glu Ile Lys Glu Lys Asp
 275 280 285
 Ser Glu Leu Asn Gln Lys Arg Pro Gln Tyr Ile Lys Ala Lys Glu Asn

290	295	300
Thr Ser His Lys Ile	Lys Lys Leu Glu Ala	Ala Lys Lys Ser Leu Gln
305	310	315
Asn Ala Gln Lys His Tyr	Lys Lys Arg Lys Gly	Asp Met Asp Glu Leu
325	330	335
Glu Lys Glu Met Leu Ser Val	Glu Lys Ala Arg Gln	Glu Phe Glu Glu
340	345	350
Arg Met Glu Glu Glu Ser Gln	Ser Gln Gly Arg Asp	Leu Thr Leu Glu
355	360	365
Glu Asn Gln Val Lys Lys Tyr	His Arg Leu Lys Glu	Glu Ala Ser Lys
370	375	380
Arg Ala Ala Thr Leu Ala Gln	Glu Leu Glu Lys Phe	Asn Arg Asp Gln
385	390	395
Lys Ala Asp Gln Asp Arg	Leu Asp Leu Glu Glu	Arg Lys Lys Val Glu
405	410	415
Thr Glu Ala Lys Ile Lys	Gln Lys Leu Arg Glu	Ile Glu Glu Asn Gln
420	425	430
Lys Arg Ile Glu Lys Leu Glu	Glu Tyr Ile Thr Thr	Ser Lys Gln Ser
435	440	445
Leu Glu Glu Gln Lys Lys Leu	Glu Gly Glu Leu Thr	Glu Glu Val Glu
450	455	460
Met Ala Lys Arg Arg Ile Asp	Glu Ile Asn Lys Glu	Leu Asn Gln Val
465	470	475
Met Glu Gln Leu Gly Asp	Ala Arg Ile Asp	Arg Gln Glu Ser Ser Arg
485	490	495
Gln Gln Arg Lys Ala Glu Ile	Met Glu Ser Ile Lys	Arg Leu Tyr Pro
500	505	510
Gly Ser Val Tyr Gly Arg	Leu Ile Asp Leu Cys	Gln Pro Thr Gln Lys
515	520	525
Lys Tyr Gln Ile Ala Val Thr	Lys Val Leu Gly Lys	Asn Met Asp Ala
530	535	540
Ile Ile Val Asp Ser Glu Lys	Thr Gly Arg Asp Cys	Ile Gln Tyr Ile
545	550	555
Lys Glu Gln Arg Gly Glu Pro	Glu Thr Phe Leu Pro	Leu Asp Tyr Leu
565	570	575
Glu Val Lys Pro Thr Asp	Glu Lys Leu Arg Glu	Leu Lys Gly Ala Lys
580	585	590
Leu Val Ile Asp Val Ile Arg	Tyr Glu Pro Pro His	Ile Lys Lys Ala
595	600	605
Leu Gln Tyr Ala Cys Gly Asn	Ala Leu Val Cys Asp	Asn Val Glu Asp
610	615	620
Ala Arg Arg Ile Ala Phe Gly	Gly His Gln Arg His	Lys Thr Val Ala
625	630	635
Leu Asp Gly Thr Leu Phe Gln	Lys Ser Gly Val Ile	Ser Gly Gly Ala
645	650	655
Ser Asp Leu Lys Ala Lys Ala	Arg Arg Trp Asp Glu	Lys Ala Val Asp
660	665	670
Lys Leu Lys Glu Lys Lys Glu	Arg Leu Thr Glu Glu	Leu Lys Glu Gln
675	680	685
Met Lys Ala Lys Arg Lys Glu	Ala Glu Leu Arg Gln	Val Gln Ser Gln
690	695	700
Ala His Gly Leu Gln Met Arg	Leu Lys Tyr Ser Gln	Ser Asp Leu Glu
705	710	715
Gln Thr Lys Thr Arg His Leu	Ala Leu Asn Leu Gln	Glu Lys Ser Lys
725	730	735
Leu Glu Ser Glu Leu Ala Asn	Phe Gly Pro Arg Ile	Asn Asp Ile Lys
740	745	750
Arg Ile Ile Gln Ser Arg Glu	Arg Glu Met Lys Asp	Leu Lys Glu Lys
755	760	765
Met Asn Gln Val Glu Asp Glu	Val Phe Glu Glu Phe	Cys Arg Glu Ile
770	775	780
Gly Val Arg Asn Ile Arg Glu	Phe Glu Glu Lys Val	Lys Arg Gln
785	790	795
Asn Glu Ile Ala Lys Lys Arg	Leu Glu Phe Glu Asn	Gln Lys Thr Arg
805	810	815
Leu Gly Ile Gln Leu Asp Phe	Glu Lys Asn Gln Leu	Lys Glu Asp Gln
820	825	830
Asp Lys Val His Met Trp Glu	Gln Thr Val Lys Lys	Asp Glu Asn Glu
835	840	845

Ile Glu Lys Leu Lys Lys Glu Glu Gln Arg His Met Lys Ile Ile Asp
 850 855 860
 Glu Thr Met Ala Gln Leu Gln Asp Leu Lys Asn Gln His Leu Ala Lys
 865 870 875 880
 Lys Ser Glu Val Asn Asp Lys Asn His Glu Met Glu Glu Ile Arg Lys
 885 890 895
 Lys Leu Gly Gly Ala Asn Lys Glu Met Thr His Leu Gln Lys Glu Val
 900 905 910
 Thr Ala Ile Glu Thr Lys Leu Glu Gln Lys Arg Ser Asp Arg His Asn
 915 920 925
 Leu Leu Gln Ala Cys Lys Met Gln Asp Ile Lys Leu Pro Leu Ser Lys
 930 935 940
 Gly Thr Met Asp Asp Ile Ser Gln Glu Glu Gly Ser Ser Gln Gly Glu
 945 950 955 960
 Asp Ser Val Ser Gly Ser Gln Arg Ile Ser Ser Ile Tyr Ala Arg Glu
 965 970 975
 Ala Leu Ile Glu Ile Asp Tyr Gly Asp Leu Cys Glu Asp Leu Lys Asp
 980 985 990
 Ala Gln Ala Glu Glu Glu Ile Lys Gln Glu Met Asn Thr Leu Gln Gln
 995 1000 1005
 Lys Leu Asn Glu Gln Gln Ser Val Leu Gln Arg Ile Ala Ala Pro
 1010 1015 1020
 Asn Met Lys Ala Met Glu Lys Leu Glu Ser Val Arg Asp Lys Phe
 1025 1030 1035
 Gln Glu Thr Ser Asp Glu Phe Glu Ala Ala Arg Lys Arg Ala Lys
 1040 1045 1050
 Lys Ala Lys Gln Ala Phe Glu Gln Ile Lys Lys Glu Arg Phe Asp
 1055 1060 1065
 Arg Phe Asn Ala Cys Phe Glu Ser Val Ala Thr Asn Ile Asp Glu
 1070 1075 1080
 Ile Tyr Lys Ala Leu Ser Arg Asn Ser Ser Ala Gln Ala Phe Leu
 1085 1090 1095
 Gly Pro Glu Asn Pro Glu Glu Pro Tyr Leu Asp Gly Ile Asn Tyr
 1100 1105 1110
 Asn Cys Val Ala Pro Gly Lys Arg Phe Arg Pro Met Asp Asn Leu
 1115 1120 1125
 Ser Gly Gly Glu Lys Thr Val Ala Ala Leu Ala Leu Leu Phe Ala
 1130 1135 1140
 Ile His Ser Tyr Lys Pro Ala Pro Phe Phe Val Leu Asp Glu Ile
 1145 1150 1155
 Asp Ala Ala Leu Asp Asn Thr Asn Ile Gly Lys Val Ala Asn Tyr
 1160 1165 1170
 Ile Lys Glu Gln Ser Thr Cys Asn Phe Gln Ala Ile Val Ile Ser
 1175 1180 1185
 Leu Lys Glu Glu Phe Tyr Thr Lys Ala Glu Ser Leu Ile Gly Val
 1190 1195 1200
 Tyr Pro Glu Gln Gly Asp Cys Val Ile Ser Lys Val Leu Thr Phe
 1205 1210 1215
 Asp Leu Thr Lys Tyr Pro Asp Ala Asn Pro Asn Pro Asn Glu Gln
 1220 1225 1230

<210> 175

<211> 501

<212> PRT

<213> Homo sapiens

<400> 175

Met Asn Arg Ser Arg Gln Val Thr Cys Val Ala Trp Val Arg Cys Gly
 1 5 10 15
 Val Ala Lys Glu Thr Pro Asp Lys Val Glu Leu Ser Lys Glu Glu Val
 20 25 30
 Lys Arg Leu Ile Ala Glu Ala Lys Glu Lys Leu Gln Glu Gly Gly
 35 40 45
 Gly Ser Asp Glu Glu Glu Thr Gly Ser Pro Ser Glu Asp Gly Met Gln
 50 55 60
 Ser Ala Arg Thr Gln Ala Arg Pro Arg Glu Pro Leu Glu Asp Gly Asp
 65 70 75 80
 Pro Glu Asp Asp Arg Thr Leu Asp Asp Asp Glu Leu Ala Glu Tyr Asp
 85 90 95
 Leu Asp Lys Tyr Asp Glu Glu Gly Asp Pro Asp Ala Glu Thr Leu Gly

100 105 110
 Glu Ser Leu Leu Gly Leu Thr Val Tyr Gly Ser Asn Asp Gln Asp Pro
 115 120 125
 Tyr Val Thr Leu Lys Asp Thr Glu Gln Tyr Glu Arg Glu Asp Phe Leu
 130 135 140
 Ile Lys Pro Ser Asp Asn Leu Ile Val Cys Gly Arg Ala Glu Gln Asp
 145 150 155
 Gln Cys Asn Leu Glu Val His Val Tyr Asn Gln Glu Glu Asp Ser Phe
 165 170 175
 Tyr Val His His Asp Ile Leu Leu Ser Ala Tyr Pro Leu Ser Val Glu
 180 185 190
 Trp Leu Asn Phe Asp Pro Ser Pro Asp Asp Ser Thr Gly Asn Tyr Ile
 195 200 205
 Ala Val Gly Asn Met Thr Pro Val Ile Glu Val Trp Asp Leu Asp Ile
 210 215 220
 Val Asp Ser Leu Glu Pro Val Phe Thr Leu Gly Ser Lys Leu Ser Lys
 225 230 235 240
 Lys Lys Lys Lys Lys Gly Lys Lys Ser Ser Ser Ala Glu Gly His Thr
 245 250 255
 Asp Ala Val Leu Asp Leu Ser Trp Asn Lys Leu Ile Arg Asn Val Leu
 260 265 270
 Ala Ser Ala Ser Ala Asp Asn Thr Val Ile Leu Trp Asp Met Ser Leu
 275 280 285
 Gly Lys Pro Ala Ala Ser Leu Ala Val His Thr Asp Lys Val Gln Thr
 290 295 300
 Leu Gln Phe His Pro Phe Glu Ala Gln Thr Leu Ile Ser Gly Ser Tyr
 305 310 315 320
 Asp Lys Ser Val Ala Leu Tyr Asp Cys Arg Ser Pro Asp Glu Ser His
 325 330 335
 Arg Met Trp Arg Phe Ser Gly Gln Ile Glu Arg Val Thr Trp Asn His
 340 345 350
 Phe Ser Pro Cys His Phe Leu Ala Ser Thr Asp Asp Gly Phe Val Tyr
 355 360 365
 Asn Leu Asp Ala Arg Ser Asp Lys Pro Ile Phe Thr Leu Asn Ala His
 370 375 380
 Asn Asp Glu Ile Ser Gly Leu Asp Leu Ser Ser Gln Ile Lys Gly Cys
 385 390 395 400
 Leu Val Thr Ala Ser Ala Asp Lys Tyr Val Lys Ile Trp Asp Ile Leu
 405 410 415
 Gly Asp Arg Pro Ser Leu Val His Ser Arg Asp Met Lys Met Gly Val
 420 425 430
 Leu Phe Cys Ser Ser Cys Cys Pro Asp Leu Pro Phe Ile Tyr Ala Phe
 435 440 445
 Gly Gly Gln Lys Glu Gly Leu Arg Val Trp Asp Ile Ser Thr Val Ser
 450 455 460
 Ser Val Asn Glu Ala Phe Gly Arg Arg Glu Arg Leu Val Leu Gly Ser
 465 470 475 480
 Ala Arg Asn Ser Ser Ile Ser Gly Pro Phe Gly Ser Arg Ser Ser Asp
 485 490 495
 Thr Pro Met Glu Ser
 500

<210> 176
 <211> 488
 <212> PRT
 <213> Homo sapiens
 <400> 176

Met Ala Tyr Ser Gln Gly Gly Gly Lys Lys Lys Val Cys Tyr Tyr Tyr
 1 5 10 15
 Asp Gly Asp Ile Gly Asn Tyr Tyr Tyr Gly Gln Gly His Pro Met Lys
 20 25 30
 Pro His Arg Ile Arg Met Thr His Asn Leu Leu Leu Asn Tyr Gly Leu
 35 40 45
 Tyr Arg Lys Met Glu Ile Tyr Arg Pro His Lys Ala Thr Ala Glu Glu
 50 55 60
 Met Thr Lys Tyr His Ser Asp Glu Tyr Ile Lys Phe Leu Arg Ser Ile
 65 70 75 80
 Arg Pro Asp Asn Met Ser Glu Tyr Ser Lys Gln Met His Ile Phe Asn
 85 90 95

Val Gly Glu Asp Cys Pro Ala Phe Asp Gly Leu Phe Glu Phe Cys Gln
 100 105 110
 Leu Ser Thr Gly Gly Ser Val Ala Gly Ala Val Lys Leu Asn Arg Gln
 115 120 125
 Gln Thr Asp Met Ala Val Asn Trp Ala Gly Gly Leu His His Ala Lys
 130 135 140
 Lys Tyr Glu Ala Ser Gly Phe Cys Tyr Val Asn Asp Ile Val Leu Ala
 145 150 155 160
 Ile Leu Glu Leu Leu Lys Tyr His Gln Arg Val Leu Tyr Ile Asp Ile
 165 170 175
 Asp Ile His His Gly Asp Gly Val Glu Glu Ala Phe Tyr Thr Thr Asp
 180 185 190
 Arg Val Met Thr Val Ser Phe His Lys Tyr Gly Glu Tyr Phe Pro Gly
 195 200 205
 Thr Gly Asp Leu Arg Asp Ile Gly Ala Gly Lys Gly Lys Tyr Tyr Ala
 210 215 220
 Val Asn Phe Pro Met Cys Asp Gly Ile Asp Asp Glu Ser Tyr Gly Gln
 225 230 235 240
 Ile Phe Lys Pro Ile Ile Ser Lys Val Met Glu Met Tyr Gln Pro Ser
 245 250 255
 Ala Val Val Leu Gln Cys Gly Ala Asp Ser Leu Ser Gly Asp Arg Leu
 260 265 270
 Gly Cys Phe Asn Leu Thr Val Lys Gly His Ala Lys Cys Val Glu Val
 275 280 285
 Val Lys Thr Phe Asn Leu Pro Leu Leu Met Leu Gly Gly Gly Tyr
 290 295 300
 Thr Ile Arg Asn Val Ala Arg Cys Trp Thr Tyr Glu Thr Ala Val Ala
 305 310 315 320
 Leu Asp Cys Glu Ile Pro Asn Glu Leu Pro Tyr Asn Asp Tyr Phe Glu
 325 330 335
 Tyr Phe Gly Pro Asp Phe Lys Leu His Ile Ser Pro Ser Asn Met Thr
 340 345 350
 Asn Gln Asn Thr Pro Glu Tyr Met Glu Lys Ile Lys Gln Arg Leu Phe
 355 360 365
 Glu Asn Leu Arg Met Leu Pro His Ala Pro Gly Val Gln Met Gln Ala
 370 375 380
 Ile Pro Glu Asp Ala Val His Glu Asp Ser Gly Asp Glu Asp Gly Glu
 385 390 395 400
 Asp Pro Asp Lys Arg Ile Ser Ile Arg Ala Ser Asp Lys Arg Ile Ala
 405 410 415
 Cys Asp Glu Glu Phe Ser Asp Ser Glu Asp Glu Gly Glu Gly Arg
 420 425 430
 Arg Asn Val Ala Asp His Lys Lys Gly Ala Lys Lys Ala Arg Ile Glu
 435 440 445
 Glu Asp Lys Lys Glu Thr Glu Asp Lys Lys Thr Asp Val Lys Glu Glu
 450 455 460
 Asp Lys Ser Lys Asp Asn Ser Gly Glu Lys Thr Asp Thr Lys Gly Thr
 465 470 475 480
 Lys Ser Glu Gln Leu Ser Asn Pro
 485

<210> 177

<211> 270

<212> PRT

<213> Homo sapiens

<400> 177

Met Gly Asn Thr Ser Ser Glu Arg Ala Ala Leu Glu Arg His Gly Gly
 1 5 10 15
 His Lys Thr Pro Arg Arg Asp Ser Ser Gly Gly Thr Lys Asp Gly Asp
 20 25 30
 Arg Pro Lys Ile Leu Met Asp Ser Pro Glu Asp Ala Asp Leu Phe His
 35 40 45
 Ser Glu Glu Ile Lys Ala Pro Glu Lys Glu Glu Phe Leu Ala Trp Gln
 50 55 60
 His Asp Leu Glu Val Asn Asp Lys Ala Pro Ala Gln Ala Arg Pro Thr
 65 70 75 80
 Val Phe Arg Trp Thr Gly Gly Gly Lys Glu Val Tyr Leu Ser Gly Ser
 85 90 95
 Phe Asn Asn Trp Ser Lys Leu Pro Leu Thr Arg Ser His Asn Asn Phe

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      100      105      110
Val Ala Ile Leu Asp Leu Pro Glu Gly Glu His Gln Tyr Lys Phe Phe
      115      120      125
Val Asp Gly Gln Trp Thr His Asp Pro Ser Glu Pro Ile Val Thr Ser
      130      135      140
Gln Leu Gly Thr Val Asn Asn Ile Ile Gln Val Lys Lys Thr Asp Phe
      145      150      155
Glu Val Phe Asp Ala Leu Met Val Asp Ser Gln Lys Cys Ser Asp Val
      165      170      175
Ser Glu Leu Ser Ser Ser Pro Pro Gly Pro Tyr His Gln Glu Pro Tyr
      180      185      190
Val Cys Lys Pro Glu Glu Arg Phe Arg Ala Pro Pro Ile Leu Pro Pro
      195      200      205
His Leu Leu Gln Val Ile Leu Asn Lys Asp Thr Gly Ile Ser Cys Asp
      210      215      220
Pro Ala Leu Leu Pro Glu Pro Asn His Val Met Leu Asn His Leu Tyr
      225      230      235
Ala Leu Ser Ile Lys Asp Gly Val Met Val Leu Ser Ala Thr His Arg
      245      250      255
Tyr Lys Lys Lys Tyr Val Thr Thr Leu Leu Tyr Lys Pro Ile
      260      265      270

<210> 178
<211> 514
<212> PRT
<213> Homo sapiens
<400> 178
Met Ala Asp Tyr Leu Ile Ser Gly Gly Thr Ser Tyr Val Pro Asp Asp
1      5      10      15
Gly Leu Thr Ala Gln Gln Leu Phe Asn Cys Gly Asp Gly Leu Thr Tyr
      20      25      30
Asn Asp Phe Leu Ile Leu Pro Gly Tyr Ile Asp Phe Thr Ala Asp Gln
      35      40      45
Val Asp Leu Thr Ser Ala Leu Thr Lys Lys Ile Thr Leu Lys Thr Pro
      50      55      60
Leu Val Ser Ser Pro Met Asp Thr Val Thr Glu Ala Gly Met Ala Ile
      65      70      75
Ala Met Ala Leu Thr Gly Gly Ile Gly Phe Ile His His Asn Cys Thr
      85      90      95
Pro Glu Phe Gln Ala Asn Glu Val Arg Lys Val Lys Lys Tyr Glu Gln
      100      105      110
Gly Phe Ile Thr Asp Pro Val Val Leu Ser Pro Lys Asp Arg Val Arg
      115      120      125
Asp Val Phe Glu Ala Lys Ala Arg His Gly Phe Cys Gly Ile Pro Ile
      130      135      140
Thr Asp Thr Gly Arg Met Gly Ser Arg Leu Val Gly Ile Ile Ser Ser
      145      150      155
Arg Asp Ile Asp Phe Leu Lys Glu Glu Glu His Asp Cys Phe Leu Glu
      165      170      175
Glu Ile Met Thr Lys Arg Glu Asp Leu Val Val Ala Pro Arg Ser Ile
      180      185      190
Thr Leu Lys Glu Ala Asn Glu Ile Leu Gln Arg Ser Lys Lys Gly Lys
      195      200      205
Leu Pro Ile Val Asn Glu Asp Asp Glu Leu Val Ala Ile Ile Ala Arg
      210      215      220
Thr Asp Leu Lys Lys Asn Arg Asp Tyr Pro Leu Ala Ser Lys Asp Ala
      225      230      235
Lys Lys Gln Leu Leu Cys Gly Ala Ala Ile Gly Thr His Glu Asp Asp
      245      250      255
Lys Tyr Arg Leu Asp Leu Leu Ala Gln Ala Gly Val Asp Val Val Val
      260      265      270
Leu Asp Ser Ser Gln Gly Asn Ser Ile Phe Gln Ile Asn Met Ile Lys
      275      280      285
Tyr Ile Lys Asp Lys Tyr Pro Asn Leu Gln Val Ile Gly Gly Asn Val
      290      295      300
Val Thr Ala Ala Gln Ala Lys Asn Leu Ile Asp Ala Gly Val Asp Ala
      305      310      315
Leu Arg Val Gly Met Gly Ser Gly Ser Ile Cys Ile Thr Gln Glu Val
      325      330      335

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Leu Ala Cys Gly Arg Pro Gln Ala Thr Ala Val Tyr Lys Val Ser Glu
 340 345 350
 Tyr Ala Arg Arg Phe Gly Val Pro Val Ile Ala Asp Gly Gly Ile Gln
 355 360 365
 Asn Val Gly His Ile Ala Lys Ala Leu Ala Leu Gly Ala Ser Thr Val
 370 375 380
 Met Met Gly Ser Leu Leu Ala Ala Thr Thr Glu Ala Pro Gly Glu Tyr
 385 390 395 400
 Phe Phe Ser Asp Gly Ile Arg Leu Lys Lys Tyr Arg Gly Met Gly Ser
 405 410 415
 Leu Asp Ala Met Asp Lys His Leu Ser Ser Gln Asn Arg Tyr Phe Ser
 420 425 430
 Glu Ala Asp Lys Ile Lys Val Ala Gln Gly Val Ser Gly Ala Val Gln
 435 440 445
 Asp Lys Gly Ser Ile His Lys Phe Val Pro Tyr Leu Ile Ala Gly Ile
 450 455 460
 Gln His Ser Cys Gln Asp Ile Gly Ala Lys Ser Leu Thr Gln Val Arg
 465 470 475 480
 Ala Met Met Tyr Ser Gly Glu Leu Lys Phe Glu Lys Arg Thr Ser Ser
 485 490 495
 Ala Gln Val Glu Gly Gly Val His Ser Leu His Ser Tyr Glu Lys Arg
 500 505 510
 Leu Phe

<210> 179
 <211> 152
 <212> PRT
 <213> Homo sapiens
 <400> 179

Met Ser Thr Pro Ala Arg Arg Arg Leu Met Arg Asp Phe Lys Arg Leu
 1 5 10 15
 Gln Glu Asp Pro Pro Ala Gly Val Ser Gly Ala Pro Ser Glu Asn Asn
 20 25 30
 Ile Met Val Trp Asn Ala Val Ile Phe Gly Pro Glu Gly Thr Pro Phe
 35 40 45
 Glu Asp Gly Thr Phe Lys Leu Thr Ile Glu Phe Thr Glu Glu Tyr Pro
 50 55 60
 Asn Lys Pro Pro Thr Val Arg Phe Val Ser Lys Met Phe His Pro Asn
 65 70 75 80
 Val Tyr Ala Asp Gly Ser Ile Cys Leu Asp Ile Leu Gln Asn Arg Trp
 85 90 95
 Ser Pro Thr Tyr Asp Val Ser Ser Ile Leu Thr Ser Ile Gln Ser Leu
 100 105 110
 Leu Asp Glu Pro Asn Pro Asn Ser Pro Ala Asn Ser Gln Ala Ala Gln
 115 120 125
 Leu Tyr Gln Glu Asn Lys Arg Glu Tyr Glu Lys Arg Val Ser Ala Ile
 130 135 140
 Val Glu Gln Ser Trp Arg Asp Cys
 145 150

<210> 180
 <211> 260
 <212> PRT
 <213> Homo sapiens
 <400> 180

Met Pro Gln Asn Glu Tyr Ile Glu Leu His Arg Lys Arg Tyr Gly Tyr
 1 5 10 15
 Arg Leu Asp Tyr His Glu Lys Lys Arg Lys Lys Glu Ser Arg Glu Ala
 20 25 30
 His Glu Arg Ser Lys Lys Ala Lys Lys Met Ile Gly Leu Lys Ala Lys
 35 40 45
 Leu Tyr His Lys Gln Arg His Ala Glu Lys Ile Gln Met Lys Lys Thr
 50 55 60
 Ile Lys Met His Glu Lys Arg Asn Thr Lys Gln Lys Asn Asp Glu Lys
 65 70 75 80
 Thr Pro Gln Gly Ala Val Pro Ala Tyr Leu Leu Asp Arg Glu Gly Gln
 85 90 95
 Ser Arg Ala Lys Val Leu Ser Asn Met Ile Lys Gln Lys Arg Lys Glu

100 105 110
 Lys Ala Gly Lys Trp Glu Val Pro Leu Pro Lys Val Arg Ala Gln Gly
 115 120 125
 Glu Thr Glu Val Leu Lys Val Ile Arg Thr Gly Lys Arg Lys Lys Lys
 130 135 140
 Ala Trp Lys Arg Met Val Thr Lys Val Cys Phe Val Gly Asp Gly Phe
 145 150 155
 Thr Arg Lys Pro Pro Lys Tyr Glu Arg Phe Ile Arg Pro Met Gly Leu
 165 170 175
 Arg Phe Lys Lys Ala His Val Thr His Pro Glu Leu Lys Ala Thr Phe
 180 185 190
 Cys Leu Pro Ile Leu Gly Val Lys Lys Asn Pro Ser Ser Pro Leu Tyr
 195 200 205
 Thr Thr Leu Gly Val Ile Thr Lys Gly Thr Val Ile Glu Val Asn Val
 210 215 220
 Ser Glu Leu Gly Leu Val Thr Gln Gly Gly Lys Val Ile Trp Gly Lys
 225 230 235
 Tyr Ala Gln Val Thr Asn Asn Pro Glu Asn Asp Gly Cys Ile Asn Ala
 245 250 255
 Val Leu Leu Val
 260

<210> 181
 <211> 790
 <212> PRT
 <213> Homo sapiens
 <400> 181

Met Glu Ala Thr Ser Arg Glu Ala Ala Pro Ala Lys Ser Ser Ala Ser
 1 5 10 15
 Gly Pro Asn Ala Pro Pro Ala Leu Phe Glu Leu Cys Gly Arg Ala Val
 20 25 30
 Ser Ala His Met Gly Val Leu Glu Ser Gly Val Trp Ala Leu Pro Gly
 35 40 45
 Pro Ile Leu Gln Ser Ile Leu Pro Leu Leu Asn Ile Tyr Tyr Leu Glu
 50 55 60
 Arg Ile Glu Glu Thr Ala Leu Lys Lys Gly Leu Ser Thr Gln Ala Ile
 65 70 75 80
 Trp Arg Arg Leu Trp Asp Glu Leu Met Lys Thr Arg Pro Ser Ser Leu
 85 90 95
 Glu Ser Val Thr Cys Trp Arg Ala Lys Phe Met Glu Ala Phe Phe Ser
 100 105 110
 His Val Leu Arg Gly Thr Ile Asp Val Ser Ser Asp Arg Arg Leu Cys
 115 120 125
 Asp Gln Arg Phe Ser Pro Leu Leu His Ser Ser Arg His Val Arg Gln
 130 135 140
 Leu Thr Ile Cys Asn Met Leu Gln Gly Ala Thr Glu Leu Val Ala Glu
 145 150 155 160
 Pro Asn Arg Arg Val Leu Glu Thr Leu Ala Ser Ser Leu His Thr Leu
 165 170 175
 Lys Phe Arg His Leu Leu Phe Ser Asp Val Ala Ala Gln Gln Ser Leu
 180 185 190
 Arg Gln Leu Leu His Gln Leu Ile His His Gly Ala Val Ser Gln Val
 195 200 205
 Ser Leu Tyr Ser Trp Pro Val Pro Glu Ser Ala Leu Phe Ile Leu Ile
 210 215 220
 Leu Thr Met Ser Ala Gly Phe Trp Gln Pro Gly Pro Gly Gly Pro Pro
 225 230 235 240
 Cys Arg Leu Cys Gly Glu Ala Ser Arg Gly Arg Ala Pro Ser Arg Asp
 245 250 255
 Glu Gly Ser Leu Leu Gly Ser Arg Arg Pro Arg Arg Asp Ala Ala
 260 265 270
 Glu Arg Cys Ala Ala Ala Leu Met Ala Ser Arg Arg Lys Ser Glu Ala
 275 280 285
 Lys Gln Met Pro Arg Ala Ala Pro Ala Thr Arg Val Thr Arg Arg Ser
 290 295 300
 Thr Gln Glu Ser Leu Thr Ala Gly Gly Thr Asp Leu Lys Arg Glu Leu
 305 310 315 320
 His Pro Pro Ala Thr Ser His Glu Ala Pro Gly Thr Lys Arg Ser Pro
 325 330 335

Ser Ala Pro Ala Ala Thr Ser Ser Ala Ser Ser Ser Thr Ser Ser Tyr
 340 345 350
 Lys Arg Ala Pro Ala Ser Ser Ala Pro Gln Pro Lys Pro Leu Lys Arg
 355 360 365
 Phe Lys Arg Ala Ala Gly Lys Lys Gly Ala Arg Thr Arg Gln Gly Pro
 370 375 380
 Gly Ala Glu Ser Glu Asp Leu Tyr Asp Phe Val Phe Ile Val Ala Gly
 385 390 395 400
 Glu Lys Glu Asp Gly Glu Glu Met Glu Ile Gly Glu Val Ala Cys Gly
 405 410 415
 Ala Leu Asp Gly Ser Asp Pro Ser Cys Leu Gly Leu Pro Ala Leu Glu
 420 425 430
 Ala Ser Gln Arg Phe Arg Ser Ile Ser Thr Leu Glu Leu Phe Thr Val
 435 440 445
 Pro Leu Ser Thr Glu Ala Ala Leu Thr Leu Cys His Leu Leu Ser Ser
 450 455 460
 Trp Val Ser Leu Glu Ser Leu Thr Leu Ser Tyr Asn Gly Leu Gly Ser
 465 470 475 480
 Asn Ile Phe Arg Leu Leu Asp Ser Leu Arg Ala Leu Ser Gly Gln Ala
 485 490 495
 Gly Cys Arg Leu Arg Ala Leu His Leu Ser Asp Leu Phe Ser Pro Leu
 500 505 510
 Pro Ile Leu Glu Leu Thr Arg Ala Ile Val Arg Ala Leu Pro Leu Leu
 515 520 525
 Arg Val Leu Ser Ile Arg Val Asp His Pro Ser Gln Arg Asp Asn Pro
 530 535 540
 Gly Val Pro Gly Asn Ala Gly Pro Pro Ser His Ile Ile Gly Asp Glu
 545 550 555 560
 Glu Ile Pro Glu Asn Cys Leu Glu Gln Leu Glu Met Gly Phe Pro Arg
 565 570 575
 Gly Ala Gln Pro Ala Pro Leu Leu Cys Ser Val Leu Lys Ala Ser Gly
 580 585 590
 Ser Leu Gln Gln Leu Ser Leu Asp Ser Ala Thr Phe Ala Ser Pro Gln
 595 600 605
 Asp Phe Gly Leu Val Leu Gln Thr Leu Lys Glu Tyr Asn Leu Ala Leu
 610 615 620
 Lys Arg Leu Ser Phe His Asp Met Asn Leu Ala Asp Cys Gln Ser Glu
 625 630 635 640
 Val Leu Phe Leu Leu Gln Asn Leu Thr Leu Gln Glu Ile Thr Phe Ser
 645 650 655
 Phe Cys Arg Leu Phe Glu Lys Arg Pro Ala Gln Phe Leu Pro Glu Met
 660 665 670
 Val Ala Ala Met Lys Gly Asn Ser Thr Leu Lys Gly Leu Arg Leu Pro
 675 680 685
 Gly Asn Arg Leu Gly Asn Ala Gly Leu Leu Ala Leu Ala Asp Val Phe
 690 695 700
 Ser Glu Asp Ser Ser Ser Ser Leu Cys Gln Leu Asp Ile Ser Ser Asn
 705 710 715 720
 Cys Ile Lys Pro Asp Gly Leu Leu Glu Phe Ala Lys Arg Leu Glu Arg
 725 730 735
 Trp Gly Arg Gly Ala Phe Gly His Leu Arg Leu Phe Gln Asn Trp Leu
 740 745 750
 Asp Gln Asp Ala Val Thr Ala Arg Glu Ala Ile Arg Arg Leu Arg Ala
 755 760 765
 Thr Cys His Val Val Ser Asp Ser Trp Asp Ser Ser Gln Ala Phe Ala
 770 775 780
 Asp Tyr Val Ser Thr Met
 785 790

<210> 182
 <211> 2058
 <212> PRT
 <213> Homo sapiens
 <400> 182

Met Asp Asn Phe Phe Thr Glu Gly Thr Arg Val Trp Leu Arg Glu Asn
 1 5 10 15
 Gly Gln His Phe Pro Ser Thr Val Asn Ser Cys Ala Glu Gly Ile Val
 20 25 30
 Val Phe Arg Thr Asp Tyr Gly Gln Val Phe Thr Tyr Lys Gln Ser Thr

35 40 45
 Ile Thr His Gln Lys Val Thr Ala Met His Pro Thr Asn Glu Glu Gly
 50 55 60
 Val Asp Asp Met Ala Ser Leu Thr Glu Leu His Gly Gly Ser Ile Met
 65 70 75 80
 Tyr Asn Leu Phe Gln Arg Tyr Lys Arg Asn Gln Ile Tyr Thr Tyr Ile
 85 90 95
 Gly Ser Ile Leu Ala Ser Val Asn Pro Tyr Gln Pro Ile Ala Gly Leu
 100 105 110
 Tyr Glu Pro Ala Thr Met Glu Gln Tyr Ser Arg Arg His Leu Gly Glu
 115 120 125
 Leu Pro Pro His Ile Phe Ala Ile Ala Asn Glu Cys Tyr Arg Cys Leu
 130 135 140
 Trp Lys Arg Tyr Asp Asn Gln Cys Ile Leu Ile Ser Gly Glu Ser Gly
 145 150 155 160
 Ala Gly Lys Thr Glu Ser Thr Lys Leu Ile Leu Lys Phe Leu Ser Val
 165 170 175
 Ile Ser Gln Gln Ser Leu Glu Leu Ser Leu Lys Glu Lys Thr Ser Cys
 180 185 190
 Val Glu Arg Ala Ile Leu Glu Ser Ser Pro Ile Met Glu Ala Phe Gly
 195 200 205
 Asn Ala Lys Thr Val Tyr Asn Asn Asn Ser Ser Arg Phe Gly Lys Phe
 210 215 220
 Val Gln Leu Asn Ile Cys Gln Lys Gly Asn Ile Gln Gly Gly Arg Ile
 225 230 235 240
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 Glu Arg Asn Tyr His Ile Phe Tyr Ala Leu Leu Ala Gly Leu Glu His
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 Glu Glu Arg Glu Glu Phe Tyr Leu Ser Thr Pro Glu Asn Tyr His Tyr
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 Ser Phe Arg Glu Val Ile Thr Ala Met Asp Val Met Gln Phe Ser Lys
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 Gly Asn Ile Glu Phe Ile Thr Ala Gly Gly Ala Gln Val Ser Phe Lys
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 Leu Ala Met Ala Leu Tyr Ala Cys Cys Phe Glu Trp Val Ile Lys Lys
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 Phe Asn Ile Asn Tyr Ala Asn Glu Lys Leu Gln Glu Tyr Phe Asn Lys
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 His Ile Phe Ser Leu Glu Gln Leu Glu Tyr Ser Arg Glu Gly Leu Val
 465 470 475 480
 Trp Glu Asp Ile Asp Trp Ile Asp Asn Gly Glu Cys Leu Asp Leu Ile
 485 490 495
 Glu Lys Lys Leu Gly Leu Leu Ala Leu Ile Asn Glu Glu Ser His Phe
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 Pro Gln Ala Thr Asp Ser Thr Leu Leu Glu Lys Leu His Ser Gln His
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 Ala Asn Asn His Phe Tyr Val Lys Pro Arg Val Ala Val Asn Asn Phe
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 Gly Val Lys His Tyr Ala Gly Glu Val Gln Tyr Asp Val Arg Gly Ile
 545 550 555 560
 Leu Glu Lys Asn Arg Asp Thr Phe Arg Asp Asp Leu Leu Asn Leu Leu
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 Arg Glu Ser Arg Phe Asp Phe Ile Tyr Asp Leu Phe Glu His Val Ser
 580 585 590

Ser Arg Asn Asn Gln Asp Thr Leu Lys Cys Gly Ser Lys His Arg Arg
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 Pro Thr Val Ser Ser Gln Phe Lys Asp Ser Leu His Ser Leu Met Ala
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 Met Gln Lys Met Pro Gly Met Leu Glu Thr Val Arg Ile Arg Lys Ala Gly
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 Leu Arg Tyr Ser Gly Met Leu Glu Thr Val Arg Ile Arg Lys Ala Gly
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 Tyr Ala Val Arg Arg Pro Phe Gln Asp Phe Tyr Lys Arg Tyr Lys Val
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 Lys Thr Lys Val Phe Leu Arg Glu Ser Leu Glu Gln Lys Leu Glu Lys
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 Arg Arg Glu Glu Glu Val Ser His Ala Ala Met Val Ile Arg Ala His
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 Val Val Ile Ile Gln Lys Asn Tyr Arg Ala Phe Leu Leu Arg Arg Arg
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 Glu Glu Lys Pro Asn Phe Asn Phe Ser Gln Pro Tyr Pro Glu Glu Glu
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 Val Asp Glu Gly Phe Glu Ala Asp Asp Ala Phe Lys Asp Ser Pro
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 Asn Pro Ser Glu His Gly His Ser Asp Gln Arg Thr Ser Gly Ile
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 Ala Pro Ser Val Gln Asp Ser Gly Ser Leu His Asn Ser Ser Ser
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 Gly Glu Ser Thr Tyr Cys Met Pro Gln Asn Ala Gly Asp Leu Pro
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 Ser Pro Asp Gly Asp Tyr Asp Tyr Asp Gln Asp Asp Tyr Glu Asp
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 Gly Ala Ile Thr Ser Gly Ser Ser Val Thr Phe Ser Asn Ser Tyr
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 Gly Ser Gln Trp Ser Pro Asp Tyr Arg Cys Ser Val Gly Thr Tyr
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Asp	Asp	Glu	Leu	Ser	Tyr	Arg	Arg	Asp	Ser	Val	Tyr	Ser	Cys	Val
1160						1165					1170			
Thr	Leu	Pro	Tyr	Phe	His	Ser	Phe	Leu	Tyr	Met	Lys	Gly	Gly	Leu
1175						1180					1185			
Met	Asn	Ser	Trp	Lys	Arg	Arg	Trp	Cys	Val	Leu	Lys	Asp	Glu	Thr
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Phe	Leu	Trp	Phe	Arg	Ser	Lys	Gln	Glu	Ala	Leu	Lys	Gln	Gly	Trp
1205						1210					1215			
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1220						1225					1230			
Trp	Lys	Lys	Arg	Trp	Phe	Val	Leu	Arg	Gln	Ser	Lys	Leu	Met	Tyr
1235						1240					1245			
Phe	Glu	Asn	Asp	Ser	Glu	Glu	Lys	Leu	Lys	Gly	Thr	Val	Glu	Val
1250						1255					1260			
Arg	Thr	Ala	Lys	Glu	Ile	Ile	Asp	Asn	Thr	Thr	Lys	Glu	Asn	Gly
1265						1270					1275			
Ile	Asp	Ile	Ile	Met	Ala	Asp	Arg	Thr	Phe	His	Leu	Ile	Ala	Glu
1280						1285					1290			
Ser	Pro	Glu	Asp	Ala	Ser	Gln	Trp	Phe	Ser	Val	Leu	Ser	Gln	Val
1295						1300					1305			
His	Ala	Ser	Thr	Asp	Gln	Glu	Ile	Gln	Glu	Met	His	Asp	Glu	Gln
1310						1315					1320			
Ala	Asn	Pro	Gln	Asn	Ala	Val	Gly	Thr	Leu	Asp	Val	Gly	Leu	Ile
1325						1330					1335			
Asp	Ser	Val	Cys	Ala	Ser	Asp	Ser	Pro	Asp	Arg	Pro	Asn	Ser	Phe
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Val	Ile	Ile	Thr	Ala	Asn	Arg	Val	Leu	His	Cys	Asn	Ala	Asp	Thr
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Pro	Glu	Glu	Met	His	His	Trp	Ile	Thr	Leu	Leu	Gln	Arg	Ser	Lys
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Gly	Asp	Thr	Arg	Val	Glu	Gly	Gln	Glu	Phe	Ile	Val	Arg	Gly	Trp
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Leu	Lys	Lys	Arg	Trp	Phe	Val	Leu	Thr	His	Asn	Ser	Leu	Asp	Tyr
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Cys	Tyr	Arg	Leu	Tyr	Thr	Lys	Leu	Leu	Asn	Glu	Ala	Thr	Arg	Trp
1475						1480					1485			
Ser	Ser	Ala	Ile	Gln	Asn	Val	Thr	Asp	Thr	Lys	Ala	Pro	Ile	Asp
1490						1495					1500			
Thr	Pro	Thr	Gln	Gln	Leu	Ile	Gln	Asp	Ile	Lys	Glu	Asn	Cys	Leu
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Asn	Ser	Asp	Val	Val	Glu	Gln	Ile	Tyr	Lys	Arg	Asn	Pro	Ile	Leu
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Arg	Tyr	Thr	His	His	Pro	Leu	His	Ser	Pro	Leu	Leu	Pro	Leu	Pro
1535						1540					1545			
Tyr	Gly	Asp	Ile	Asn	Leu	Asn	Leu	Leu	Lys	Asp	Lys	Gly	Tyr	Thr
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1610						1615					1620			
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Phe	Leu	Pro	Ser	Arg	Gly	Ile	Leu	Lys	Tyr	Leu	Lys	Phe	His	Leu
1640						1645					1650			

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Thr	Ser	Glu	Val	Gly	Asp	Leu	Pro	Trp	Lys	Phe	Tyr	Phe	Lys	Leu
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1790						1795					1800			
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Arg	Leu	Gln	Tyr	Leu	Gln	Gly	Asp	Tyr	Thr	Leu	His	Ala	Ala	Ile
1835						1840					1845			
Pro	Pro	Leu	Glu	Glu	Val	Tyr	Ser	Leu	Gln	Arg	Leu	Lys	Ala	Arg
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1895						1900					1905			
Leu	Asp	Met	Trp	Ile	Lys	Glu	Glu	Val	Ser	Ser	Ala	Arg	Ala	Ser
1910						1915					1920			
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1925						1930					1935			
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Gly	Ser	Thr	Leu	Phe	Asp	Val	Glu	Cys	Lys	Glu	Gly	Gly	Phe	Pro
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<210> 183

<211> 1210

<212> PRT

<213> Homo sapiens

<400> 183

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Leu	Ser	Leu	Gln	Arg	Met	Phe	Asn	Asn	Cys	Glu	Val	Val	Leu	Gly	Asn
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	Tyr	Glu	Asn	Ser	Tyr	Ala	Leu	Ala	Val	Leu	Ser	Asn	Tyr	Asp	Ala	Asn	
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	Lys	Thr	Gly	Leu	Lys	Glu	Leu	Pro	Met	Arg	Asn	Leu	Gln	Glu	Ile	Leu	
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	His	Gly	Ala	Val	Arg	Phe	Ser	Asn	Asn	Pro	Ala	Leu	Cys	Asn	Val	Glu	
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	Ser	Ile	Gln	Trp	Arg	Asp	Ile	Val	Ser	Ser	Asp	Phe	Leu	Ser	Asn	Met	
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	Ser	Met	Asp	Phe	Gln	Asn	His	Leu	Gly	Ser	Cys	Gln	Lys	Cys	Asp	Pro	
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	Ser	Cys	Pro	Asn	Gly	Ser	Cys	Trp	Gly	Ala	Gly	Glu	Glu	Asn	Cys	Gln	
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	Lys	Leu	Thr	Lys	Ile	Ile	Cys	Ala	Gln	Gln	Cys	Ser	Gly	Arg	Cys	Arg	
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	Gly	Lys	Ser	Pro	Ser	Asp	Cys	Cys	His	Asn	Gln	Cys	Ala	Ala	Gly	Cys	
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	Thr	Gly	Pro	Arg	Glu	Ser	Asp	Cys	Leu	Val	Cys	Arg	Lys	Phe	Arg	Asp	
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	Glu	Ala	Thr	Cys	Lys	Asp	Thr	Cys	Pro	Pro	Leu	Met	Leu	Tyr	Asn	Pro	
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	Thr	Thr	Tyr	Gln	Met	Asp	Val	Asn	Pro	Glu	Gly	Lys	Tyr	Ser	Phe	Gly	
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	Gly	Ser	Cys	Val	Arg	Ala	Cys	Gly	Ala	Asp	Ser	Tyr	Glu	Met	Glu	Glu	
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	Cys	Asn	Gly	Ile	Gly	Ile	Gly	Glu	Phe	Lys	Asp	Ser	Leu	Ser	Ile	Asn	
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	Ala	Thr	Asn	Ile	Lys	His	Phe	Lys	Asn	Cys	Thr	Ser	Ile	Ser	Gly	Asp	
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	Leu	His	Ile	Leu	Pro	Val	Ala	Phe	Arg	Gly	Asp	Ser	Phe	Thr	His	Thr	
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	Pro	Pro	Leu	Asp	Pro	Gln	Glu	Leu	Asp	Ile	Leu	Lys	Thr	Val	Lys	Glu	
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	Leu	His	Ala	Phe	Glu	Asn	Leu	Glu	Ile	Arg	Gly	Arg	Thr	Lys	Gln		
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	His	Gly	Gln	Phe	Ser	Leu	Ala	Val	Val	Ser	Leu	Asn	Ile	Thr	Ser	Leu	
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	Gly	Leu	Arg	Ser	Leu	Lys	Glu	Ile	Ser	Asp	Gly	Asp	Val	Ile	Ile	Ser	
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	Gly	Asn	Lys	Asn	Leu	Cys	Tyr	Ala	Asn	Thr	Ile	Asn	Trp	Lys	Lys	Leu	
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	Asn	Ser	Cys	Lys	Ala	Thr	Gly	Gln	Val	Cys	His	Ala	Leu	Cys	Ser	Pro	
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	Glu	Gly	Cys	Trp	Gly	Pro	Glu	Pro	Arg	Asp	Cys	Val	Ser	Cys	Arg	Asn	
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	Val	Ser	Arg	Gly	Arg	Glu	Cys	Val	Asp	Lys	Cys	Asn	Leu	Leu	Glu	Gly	
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	Glu	Cys	Leu	Pro	Gln	Ala	Met	Asn	Ile	Thr	Cys	Thr	Gly	Arg	Gly	Pro	
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	Asp	Asn	Cys	Ile	Gln	Cys	Ala	His	Tyr	Ile	Asp	Gly	Pro	His	Cys	Val	
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	Lys	Thr	Cys	Pro	Ala	Gly	Val	Met	Gly	Glu	Asn	Asn	Thr	Leu	Val	Trp	
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	Lys	Tyr	Ala	Asp	Ala	Gly	His	Val	Cys	His	Leu	Cys	His	Pro	Asn	Cys	
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Thr	Tyr	Gly	Cys	Thr	Gly	Pro	Gly	Leu	Glu	Gly	Cys	Pro	Thr	Asn	Gly	
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Leu	Val	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Val	Leu	Val	Lys	Thr	Pro	
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Gln	His	Val	Lys	Ile	Thr	Asp	Phe	Gly	Leu	Ala	Lys	Leu	Leu	Gly	Ala	
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Lys	Pro	Tyr	Asp	Gly	Ile	Pro	Ala	Ser	Glu	Ile	Ser	Ser	Ile	Leu	Glu	
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Lys	Gly	Glu	Arg	Leu	Pro	Gln	Pro	Pro	Ile	Cys	Thr	Ile	Asp	Val	Tyr	
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Met	Ile	Met	Val	Lys	Cys	Trp	Met	Ile	Asp	Ala	Asp	Ser	Arg	Pro	Lys	
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			980					985						990		
Thr	Asp	Ser	Asn	Phe	Tyr	Arg	Ala	Leu	Met	Asp	Glu	Glu	Asp	Met	Asp	
		995					1000									
Asp	Val	Val	Asp	Ala	Asp	Glu	Tyr	Leu	Ile	Pro	Gln	Gln	Gly	Phe		
		1010				1015					1020					
Phe	Ser	Ser	Pro	Ser	Thr	Ser	Arg	Thr	Pro	Leu	Leu	Ser	Ser	Leu		
		1025				1030					1035					
Ser	Ala	Thr	Ser	Asn	Asn	Ser	Thr	Val	Ala	Cys	Ile	Asp	Arg	Asn		
		1040				1045					1050					
Gly	Leu	Gln	Ser	Cys	Pro	Ile	Lys	Glu	Asp	Ser	Phe	Leu	Gln	Arg		
		1055				1060					1065					
Tyr	Ser	Ser	Asp	Pro	Thr	Gly	Ala	Leu	Thr	Glu	Asp	Ser	Ile	Asp		
		1070				1075					1080					
Asp	Thr	Phe	Leu	Pro	Val	Pro	Glu	Tyr	Ile	Asn	Gln	Ser	Val	Pro		
		1085				1090					1095					
Lys	Arg	Pro	Ala	Gly	Ser	Val	Gln	Asn	Pro	Val	Tyr	His	Asn	Gln		
		1100				1105					1110					
Pro	Leu	Asn	Pro	Ala	Pro	Ser	Arg	Asp	Pro	His	Tyr	Gln	Asp	Pro		
		1115				1120					1125					
His	Ser	Thr	Ala	Val	Gly	Asn	Pro	Glu	Tyr	Leu	Asn	Thr	Val	Gln		
		1130				1135					1140					
Pro	Thr	Cys	Val	Asn	Ser	Thr	Phe	Asp	Ser	Pro	Ala	His	Trp	Ala		
		1145				1150					1155					
Gln	Lys	Gly	Ser	His	Gln	Ile	Ser	Leu	Asp	Asn	Pro	Asp	Tyr	Gln		

1160
 Gln Asp Phe Phe Pro Lys Glu 1165
 1175
 Gly Ser Thr Ala Glu Asn Ala 1180
 1190
 Ser Ser Glu Phe Ile Gly Ala 1195
 1205 1210

1170
 Gly Ile Phe Lys
 1185
 Val Ala Pro Gln
 1200

<210> 184
 <211> 453
 <212> PRT
 <213> Homo sapiens
 <400> 184

Met Pro Lys Asn Lys Lys Arg Asn Thr Pro His Arg Gly Ser Ser Ala
 1 5 10 15
 Gly Gly Gly Gly Ser Gly Ala Ala Ala Thr Ala Thr Ala Gly
 20 25 30
 Gly Gln His Arg Asn Val Gln Pro Phe Ser Asp Glu Asp Ala Ser Ile
 35 40 45
 Glu Thr Met Ser His Cys Ser Gly Tyr Ser Asp Pro Ser Ser Phe Ala
 50 55 60
 Glu Asp Gly Pro Glu Val Leu Asp Glu Glu Gly Thr Gln Glu Asp Leu
 65 70 75 80
 Glu Tyr Lys Arg Lys Gly Leu Ile Asp Leu Thr Leu Asp Lys Ser Ala
 85 90 95
 Lys Thr Arg Gln Ala Ala Leu Glu Gly Ile Lys Asn Ala Leu Ala Ser
 100 105 110
 Lys Met Leu Tyr Glu Phe Ile Leu Glu Arg Arg Met Thr Leu Thr Asp
 115 120 125
 Ser Ile Glu Arg Cys Leu Lys Lys Gly Lys Ser Asp Glu Gln Arg Ala
 130 135 140
 Ala Ala Ala Leu Ala Ser Val Leu Cys Ile Gln Leu Gly Pro Gly Ile
 145 150 155 160
 Glu Ser Glu Glu Ile Leu Lys Thr Leu Gly Pro Ile Leu Lys Lys Ile
 165 170 175
 Ile Cys Asp Gly Ser Ala Ser Met Gln Ala Arg Gln Thr Cys Ala Thr
 180 185 190
 Cys Phe Gly Val Cys Cys Phe Ile Ala Thr Asp Asp Ile Thr Glu Leu
 195 200 205
 Tyr Ser Thr Leu Glu Cys Leu Glu Asn Ile Phe Thr Lys Ser Tyr Leu
 210 215 220
 Lys Glu Lys Asp Thr Thr Val Ile Cys Ser Thr Pro Asn Thr Val Leu
 225 230 235 240
 His Ile Ser Ser Leu Leu Ala Trp Thr Leu Leu Leu Thr Ile Cys Pro
 245 250 255
 Ile Asn Glu Val Lys Lys Lys Leu Glu Met His Phe His Lys Leu Pro
 260 265 270
 Ser Leu Leu Ser Cys Asp Asp Val Asn Met Arg Ile Ala Ala Gly Glu
 275 280 285
 Ser Leu Ala Leu Leu Phe Glu Ser Leu Thr Gln Met Leu Arg Ala Leu Ala
 290 295 300
 Phe Tyr Glu Asp Met Glu Ser Leu Thr Gln Met Leu Arg Ala Leu Ala
 305 310 315 320
 Thr Asp Gly Asn Lys His Arg Ala Lys Val Asp Lys Arg Lys Gln Arg
 325 330 335
 Ser Val Phe Arg Asp Val Leu Arg Ala Val Glu Glu Arg Asp Phe Pro
 340 345 350
 Thr Glu Thr Ile Lys Phe Gly Pro Glu Arg Met Tyr Ile Asp Cys Trp
 355 360 365
 Val Lys Lys His Thr Tyr Asp Thr Phe Lys Glu Val Leu Gly Ser Gly
 370 375 380
 Met Gln Tyr Pro Leu Ala Val Lys Met Glu Phe Leu Glu Asn Val Phe
 385 390 395 400
 Glu Thr Trp Thr Pro Ser Asp Ala Leu Met Leu Gln Arg Leu Lys Thr
 405 410 415
 Met Lys Ile Ser Arg Phe Glu Arg His Leu Tyr Asn Ser Ala Ala Phe
 420 425 430
 Lys Ala Arg Thr Lys Ala Arg Ser Lys Cys Arg Asp Lys Arg Ala Asp
 435 440 445

Val Gly Glu Phe Phe
450

<210> 185

<211> 341

<212> PRT

<213> Homo sapiens

<400> 185

Met Pro Lys Arg Lys Val Thr Phe Gln Gly Val Gly Asp Glu Glu Asp
1 5 10 15
Glu Asp Glu Ile Ile Val Pro Lys Lys Lys Leu Val Asp Pro Val Ala
20 25 30
Gly Ser Gly Gly Pro Gly Ser Arg Phe Lys Gly Lys His Ser Leu Asp
35 40 45
Ser Asp Glu Glu Glu Asp Asp Asp Gly Gly Ser Ser Lys Tyr Asp
50 55 60
Ile Leu Ala Ser Glu Asp Val Glu Gly Gln Glu Ala Ala Thr Leu Pro
65 70 75 80
Ser Glu Gly Gly Val Arg Ile Thr Pro Phe Asn Leu Gln Glu Glu Met
85 90 95
Glu Glu Gly His Phe Asp Ala Asp Gly Asn Tyr Phe Leu Asn Arg Asp
100 105 110
Ala Gln Ile Arg Asp Ser Trp Leu Asp Asn Ile Asp Trp Val Lys Ile
115 120 125
Arg Glu Arg Pro Pro Gly Gln Arg Gln Ala Ser Asp Ser Glu Glu Glu
130 135 140
Asp Ser Leu Gly Gln Thr Ser Met Ser Ala Gln Ala Leu Leu Glu Gly
145 150 155 160
Leu Leu Glu Leu Leu Leu Pro Arg Glu Thr Val Ala Gly Ala Leu Arg
165 170 175
Arg Leu Gly Ala Arg Gly Gly Gly Lys Gly Arg Lys Gly Pro Gly Gln
180 185 190
Pro Ser Ser Pro Gln Arg Leu Asp Arg Leu Ser Gly Leu Ala Asp Gln
195 200 205
Met Val Ala Arg Gly Asn Leu Gly Val Tyr Gln Glu Thr Arg Glu Arg
210 215 220
Leu Ala Met Arg Leu Lys Gly Leu Gly Cys Gln Thr Leu Gly Pro His
225 230 235 240
Asn Pro Thr Pro Pro Ser Leu Asp Met Phe Ala Glu Glu Leu Ala
245 250 255
Glu Glu Glu Leu Glu Thr Pro Thr Pro Thr Gln Arg Gly Glu Ala Glu
260 265 270
Ser Arg Gly Asp Gly Leu Val Asp Val Met Trp Glu Tyr Lys Trp Glu
275 280 285
Asn Thr Gly Asp Ala Glu Leu Tyr Gly Pro Phe Thr Ser Ala Gln Met
290 295 300
Gln Thr Trp Val Ser Glu Gly Tyr Phe Pro Asp Gly Val Tyr Cys Arg
305 310 315 320
Lys Leu Asp Pro Pro Gly Gly Gln Phe Tyr Asn Ser Lys Arg Ile Asp
325 330 335
Phe Asp Leu Tyr Thr
340

<210> 186

<211> 182

<212> PRT

<213> Homo sapiens

<400> 186

Met Gly Leu Leu Ser Ile Leu Arg Lys Leu Lys Ser Ala Pro Asp Gln
1 5 10 15
Glu Val Arg Ile Leu Leu Leu Gly Leu Asp Asn Ala Gly Lys Thr Thr
20 25 30
Leu Leu Lys Gln Leu Ala Ser Glu Asp Ile Ser His Ile Thr Pro Thr
35 40 45
Gln Gly Phe Asn Ile Lys Ser Val Gln Ser Gln Gly Phe Lys Leu Asn
50 55 60
Val Trp Asp Ile Gly Gly Gln Arg Lys Ile Arg Pro Tyr Trp Lys Asn
65 70 75 80
Tyr Phe Glu Asn Thr Asp Ile Leu Ile Tyr Val Ile Asp Ser Ala Asp

85 90 95
 Arg Lys Arg Phe Glu Glu Thr Gly Gln Glu Leu Ala Glu Leu Leu Glu
 100 105 110
 Glu Glu Lys Leu Ser Cys Val Pro Val Leu Ile Phe Ala Asn Lys Gln
 115 120 125
 Asp Leu Leu Thr Ala Ala Pro Ala Ser Glu Ile Ala Glu Gly Leu Asn
 130 135 140
 Leu His Thr Ile Arg Asp Arg Val Trp Gln Ile Gln Ser Cys Ser Ala
 145 150 155 160
 Leu Thr Gly Glu Gly Val Gln Asp Gly Met Asn Trp Val Cys Lys Asn
 165 170 175
 Val Asn Ala Lys Lys Lys
 180

 <210> 187
 <211> 398
 <212> PRT
 <213> Homo sapiens
 <400> 187
 Met Ala Leu Leu Arg Arg Pro Thr Val Ser Ser Asp Leu Glu Asn Ile
 1 5 10 15
 Asp Thr Gly Val Asn Ser Lys Val Lys Ser His Val Thr Ile Arg Arg
 20 25 30
 Thr Val Leu Glu Glu Ile Gly Asn Arg Val Thr Thr Arg Ala Ala Gln
 35 40 45
 Val Ala Lys Lys Ala Gln Asn Thr Lys Val Pro Val Gln Pro Thr Lys
 50 55 60
 Thr Thr Asn Val Asn Lys Gln Leu Lys Pro Thr Ala Ser Val Lys Pro
 65 70 75 80
 Val Gln Met Glu Lys Leu Ala Pro Lys Gly Pro Ser Pro Thr Pro Glu
 85 90 95
 Asp Val Ser Met Lys Glu Glu Asn Leu Cys Gln Ala Phe Ser Asp Ala
 100 105 110
 Leu Leu Cys Lys Ile Glu Asp Ile Asp Asn Glu Asp Trp Glu Asn Pro
 115 120 125
 Gln Leu Cys Ser Asp Tyr Val Lys Asp Ile Tyr Gln Tyr Leu Arg Gln
 130 135 140
 Leu Glu Val Leu Gln Ser Ile Asn Pro His Phe Leu Asp Gly Arg Asp
 145 150 155 160
 Ile Asn Gly Arg Met Arg Ala Ile Leu Val Asp Trp Leu Val Gln Val
 165 170 175
 His Ser Lys Phe Arg Leu Leu Gln Glu Thr Leu Tyr Met Cys Val Gly
 180 185 190
 Ile Met Asp Arg Phe Leu Gln Val Gln Pro Val Ser Arg Lys Lys Leu
 195 200 205
 Gln Leu Val Gly Ile Thr Ala Leu Leu Leu Ala Ser Lys Tyr Glu Glu
 210 215 220
 Met Phe Ser Pro Asn Ile Glu Asp Phe Val Tyr Ile Thr Asp Asn Ala
 225 230 235 240
 Tyr Thr Ser Ser Gln Ile Arg Glu Met Glu Thr Leu Ile Leu Lys Glu
 245 250 255
 Leu Lys Phe Glu Leu Gly Arg Pro Leu Pro Leu His Phe Leu Arg Arg
 260 265 270
 Ala Ser Lys Ala Gly Glu Val Asp Val Glu Gln His Thr Leu Ala Lys
 275 280 285
 Tyr Leu Met Glu Leu Thr Leu Ile Asp Tyr Asp Met Val His Tyr His
 290 295 300
 Pro Ser Lys Val Ala Ala Ala Ala Ser Cys Leu Ser Gln Lys Val Leu
 305 310 315 320
 Gly Gln Gly Lys Trp Asn Leu Lys Gln Gln Tyr Tyr Thr Gly Tyr Thr
 325 330 335
 Glu Asn Glu Val Leu Glu Val Met Gln His Met Ala Lys Asn Val Val
 340 345 350
 Lys Val Asn Glu Asn Leu Thr Lys Phe Ile Ala Ile Lys Asn Lys Tyr
 355 360 365
 Ala Ser Ser Lys Leu Leu Lys Ile Ser Met Ile Pro Gln Leu Asn Ser
 370 375 380
 Lys Ala Val Lys Asp Leu Ala Ser Pro Leu Ile Gly Arg Ser
 385 390 395

<210> 188
 <211> 376
 <212> PRT
 <213> Homo sapiens
 <400> 188

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Met Gln Trp Ala Ser Leu Leu Leu Leu Ala Gly Leu Phe Ser Leu Ser
1      5      10      15
Gln Ala Gln Tyr Glu Asp Asp Pro His Trp Trp Phe His Tyr Leu Arg
20      25      30
Ser Gln Gln Ser Thr Tyr Tyr Asp Pro Tyr Asp Pro Tyr Pro Tyr Glu
35      40      45
Thr Tyr Glu Pro Tyr Pro Tyr Gly Val Asp Glu Gly Pro Ala Tyr Thr
50      55      60
Tyr Gly Ser Pro Ser Pro Pro Asp Pro Arg Asp Cys Pro Gln Glu Cys
65      70      75      80
Asp Cys Pro Pro Asn Phe Leu Thr Ala Met Tyr Cys Asp Asn Arg Asn
85      90      95
Leu Lys Tyr Leu Pro Phe Val Pro Ser Arg Met Lys Tyr Val Tyr Phe
100      105      110
Gln Asn Asn Gln Ile Thr Ser Ile Gln Glu Gly Val Phe Asp Asn Ala
115      120      125
Thr Gly Leu Leu Trp Ile Ala Leu His Gly Asn Gln Ile Thr Ser Asp
130      135      140
Lys Val Gly Arg Lys Val Phe Ser Lys Leu Arg His Leu Glu Arg Leu
145      150      155      160
Tyr Leu Asp His Asn Asn Leu Thr Arg Met Pro Gly Pro Leu Pro Arg
165      170      175
Ser Leu Arg Glu Leu His Leu Asp His Asn Gln Ile Ser Arg Val Pro
180      185      190
Asn Asn Ala Leu Glu Gly Leu Glu Asn Leu Thr Ala Leu Tyr Leu Gln
195      200      205
His Asp Glu Ile Gln Glu Val Gly Ser Ser Met Arg Gly Leu Arg Ser
210      215      220
Leu Ile Leu Leu Asp Leu Ser Tyr Asn His Leu Arg Lys Val Pro Asp
225      230      235      240
Gly Leu Pro Ser Ala Leu Glu Gln Leu Tyr Met Glu His Asn Asn Val
245      250      255
Tyr Thr Val Pro Asp Ser Tyr Phe Arg Gly Ala Pro Lys Leu Leu Tyr
260      265      270
Val Arg Leu Ser His Asn Ser Leu Leu Glu Leu Asp Leu Ser Tyr Asn Gln
275      280      285
Thr Phe Asn Ser Ser Ser Leu Leu Glu Leu Asp Leu Ser Tyr Asn Gln
290      295      300
Leu Gln Lys Ile Pro Pro Val Asn Thr Asn Leu Glu Asn Leu Tyr Leu
305      310      315      320
Gln Gly Asn Arg Ile Asn Glu Phe Ser Ile Ser Ser Phe Cys Thr Val
325      330      335
Val Asp Val Val Asn Phe Ser Lys Leu Gln Val Val Arg Leu Asp Gly
340      345      350
Asn Glu Ile Lys Arg Ser Ala Met Pro Ala Asp Ala Pro Leu Cys Leu
355      360      365
Arg Leu Ala Ser Leu Ile Glu Ile
370      375

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<210> 189
 <211> 535
 <212> PRT
 <213> Homo sapiens
 <400> 189

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Met Glu Glu Gly Ala Arg His Arg Asn Asn Thr Glu Lys Lys His Pro
1      5      10      15
Gly Gly Gly Glu Ser Asp Ala Ser Pro Glu Ala Gly Ser Gly Gly Gly
20      25      30
Gly Val Ala Leu Lys Lys Glu Ile Gly Leu Val Ser Ala Cys Gly Ile
35      40      45
Ile Val Gly Asn Ile Ile Gly Ser Gly Ile Phe Val Ser Pro Lys Gly
50      55      60
Val Leu Glu Asn Ala Gly Ser Val Gly Leu Ala Leu Ile Val Trp Ile

```

65 70 75 80
 Val Thr Gly Phe Ile Thr Val Val Gly Ala Leu Cys Tyr Ala Glu Leu
 85 90 95
 Gly Val Thr Ile Pro Lys Ser Gly Gly Asp Tyr Ser Tyr Val Lys Asp
 100 105 110
 Ile Phe Gly Gly Leu Ala Gly Phe Leu Arg Leu Trp Ile Ala Val Leu
 115 120 125
 Val Ile Tyr Pro Thr Asn Gln Ala Val Ile Ala Leu Thr Phe Ser Asn
 130 135 140
 Tyr Val Leu Gln Pro Leu Phe Pro Thr Cys Phe Pro Pro Glu Ser Gly
 145 150 155 160
 Leu Arg Leu Leu Ala Ala Ile Cys Leu Leu Leu Thr Trp Val Asn
 165 170 175
 Cys Ser Ser Val Arg Trp Ala Thr Arg Val Gln Asp Ile Phe Thr Ala
 180 185 190
 Gly Lys Leu Leu Ala Leu Ala Leu Ile Ile Met Gly Ile Val Gln
 195 200 205
 Ile Cys Lys Gly Glu Tyr Phe Trp Leu Glu Pro Lys Asn Ala Phe Glu
 210 215 220
 Asn Phe Gln Glu Pro Asp Ile Gly Leu Val Ala Leu Ala Phe Leu Gln
 225 230 235 240
 Gly Ser Phe Ala Tyr Gly Gly Trp Asn Phe Leu Asn Tyr Val Thr Glu
 245 250 255
 Glu Leu Val Asp Pro Tyr Lys Asn Leu Pro Arg Ala Ile Phe Ile Ser
 260 265 270
 Ile Pro Leu Val Thr Phe Val Tyr Val Phe Ala Asn Val Ala Tyr Val
 275 280 285
 Thr Ala Met Ser Pro Gln Glu Leu Leu Ala Ser Asn Ala Val Ala Val
 290 295 300
 Thr Phe Gly Glu Lys Leu Leu Gly Val Met Ala Trp Ile Met Pro Ile
 305 310 315 320
 Ser Val Ala Leu Ser Thr Phe Gly Gly Val Asn Gly Ser Leu Phe Thr
 325 330 335
 Ser Ser Arg Leu Phe Phe Ala Gly Ala Arg Glu Gly His Leu Pro Ser
 340 345 350
 Val Leu Ala Met Ile His Val Lys Arg Cys Thr Pro Ile Pro Ala Leu
 355 360 365
 Leu Phe Thr Cys Ile Ser Thr Leu Leu Met Leu Val Thr Ser Asp Met
 370 375 380
 Tyr Thr Leu Ile Asn Tyr Val Gly Phe Ile Asn Tyr Leu Phe Tyr Gly
 385 390 395 400
 Val Thr Val Ala Gly Gln Ile Val Leu Arg Trp Lys Lys Pro Asp Ile
 405 410 415
 Pro Arg Pro Ile Lys Ile Asn Leu Leu Phe Pro Ile Ile Tyr Leu Leu
 420 425 430
 Phe Trp Ala Phe Leu Leu Val Phe Ser Leu Trp Ser Glu Pro Val Val
 435 440 445
 Cys Gly Ile Gly Leu Ala Ile Met Leu Thr Gly Val Pro Val Tyr Phe
 450 455 460
 Leu Gly Val Tyr Trp Gln His Lys Pro Lys Cys Phe Ser Asp Phe Ile
 465 470 475 480
 Glu Leu Leu Thr Leu Val Ser Gln Lys Met Cys Val Val Val Tyr Pro
 485 490 495
 Glu Val Glu Arg Gly Ser Gly Thr Glu Ala Asn Glu Asp Met Glu
 500 505 510
 Glu Gln Gln Gln Pro Met Tyr Gln Pro Thr Pro Thr Lys Asp Lys Asp
 515 520 525
 Val Ala Gly Gln Pro Gln Pro
 530 535

<210> 190

<211> 225

<212> PRT

<213> Homo sapiens

<400> 190

Met Asn Ser Asn Val Glu Asn Leu Pro Pro His Ile Ile Arg Leu Val
 1 5 10 15
 Tyr Lys Glu Val Thr Thr Leu Thr Ala Asp Pro Pro Asp Gly Ile Lys
 20 25 30

Val Phe Pro Asn Glu Glu Asp Leu Thr Asp Leu Gln Val Thr Ile Glu
 35 40 45
 Gly Pro Glu Gly Thr Pro Tyr Ala Gly Gly Leu Phe Arg Met Lys Leu
 50 55 60
 Leu Leu Gly Lys Asp Phe Pro Ala Ser Pro Pro Lys Gly Tyr Phe Leu
 65 70 75 80
 Thr Lys Ile Phe His Pro Asn Val Gly Ala Asn Gly Glu Ile Cys Val
 85 90 95
 Asn Val Leu Lys Arg Asp Trp Thr Ala Glu Leu Gly Ile Arg His Val
 100 105 110
 Leu Leu Thr Ile Lys Cys Leu Leu Ile His Pro Asn Pro Glu Ser Ala
 115 120 125
 Leu Asn Glu Glu Ala Gly Arg Leu Leu Leu Glu Asn Tyr Glu Glu Tyr
 130 135 140
 Ala Ala Arg Ala Arg Leu Leu Thr Glu Ile His Gly Gly Ala Gly Gly
 145 150 155 160
 Pro Ser Gly Arg Ala Glu Ala Gly Arg Ala Leu Ala Ser Gly Thr Glu
 165 170 175
 Ala Ser Ser Thr Asp Pro Gly Ala Pro Gly Gly Pro Gly Gly Ala Glu
 180 185 190
 Gly Pro Met Ala Lys Lys His Ala Gly Glu Arg Asp Lys Lys Leu Ala
 195 200 205
 Ala Lys Lys Lys Thr Asp Lys Lys Arg Ala Leu Arg Ala Leu Arg Arg
 210 215 220
 Leu
 225

<210> 191
 <211> 485
 <212> PRT
 <213> Homo sapiens
 <400> 191

Met Arg Lys Arg Ala Pro Gln Ser Glu Met Ala Pro Ala Gly Val Ser
 1 5 10 15
 Leu Arg Ala Thr Ile Leu Cys Leu Leu Ala Trp Ala Gly Leu Ala Ala
 20 25 30
 Gly Asp Arg Val Tyr Ile His Pro Phe His Leu Val Ile His Asn Glu
 35 40 45
 Ser Thr Cys Glu Gln Leu Ala Lys Ala Asn Ala Gly Lys Pro Lys Asp
 50 55 60
 Pro Thr Phe Ile Pro Ala Pro Ile Gln Ala Lys Thr Ser Pro Val Asp
 65 70 75 80
 Glu Lys Ala Leu Gln Asp Gln Leu Val Leu Val Ala Ala Lys Leu Asp
 85 90 95
 Thr Glu Asp Lys Leu Arg Ala Ala Met Val Gly Met Leu Ala Asn Phe
 100 105 110
 Leu Gly Phe Arg Ile Tyr Gly Met His Ser Glu Leu Trp Gly Val Val
 115 120 125
 His Gly Ala Thr Val Leu Ser Pro Thr Ala Val Phe Gly Thr Leu Ala
 130 135 140
 Ser Leu Tyr Leu Gly Ala Leu Asp His Thr Ala Asp Arg Leu Gln Ala
 145 150 155 160
 Ile Leu Gly Val Pro Trp Lys Asp Lys Asn Cys Thr Ser Arg Leu Asp
 165 170 175
 Ala His Lys Val Leu Ser Ala Leu Gln Ala Val Gln Gly Leu Leu Val
 180 185 190
 Ala Gln Gly Arg Ala Asp Ser Gln Ala Gln Leu Leu Leu Ser Thr Val
 195 200 205
 Val Gly Val Phe Thr Ala Pro Gly Leu His Leu Lys Gln Pro Phe Val
 210 215 220
 Gln Gly Leu Ala Leu Tyr Thr Pro Val Val Leu Pro Arg Ser Leu Asp
 225 230 235 240
 Phe Thr Glu Leu Asp Val Ala Ala Glu Lys Ile Asp Arg Phe Met Gln
 245 250 255
 Ala Val Thr Gly Trp Lys Thr Gly Cys Ser Leu Met Gly Ala Ser Val
 260 265 270
 Asp Ser Thr Leu Ala Phe Asn Thr Tyr Val His Phe Gln Gly Lys Met
 275 280 285
 Lys Gly Phe Ser Leu Leu Ala Glu Pro Gln Glu Phe Trp Val Asp Asn

290
 Ser Thr Ser Val Ser Val Pro Met Leu Ser Gly Met Gly Thr Phe Gln
 305
 His Trp Ser Asp Ile Gln Asp Asn Phe Ser Val Thr Gln Val Pro Phe
 310
 Thr Glu Ser Ala Cys Leu Leu Leu Ile Gln Pro His Tyr Ala Ser Asp
 325
 Leu Asp Lys Val Glu Gly Leu Thr Phe Gln Gln Asn Ser Leu Asn Trp
 340
 Met Lys Lys Leu Ser Pro Arg Thr Ile His Leu Thr Met Pro Gln Leu
 355
 Val Leu Gln Gly Ser Tyr Asp Leu Gln Asp Leu Leu Ala Gln Ala Glu
 370
 Leu Pro Ala Ile Leu His Thr Glu Leu Asn Leu Gln Lys Leu Ser Asn
 385
 Asp Arg Ile Arg Val Gly Glu Val Leu Asn Ser Ile Phe Phe Glu Leu
 405
 Glu Ala Asp Glu Arg Glu Pro Thr Glu Ser Thr Gln Gln Leu Asn Lys
 420
 Pro Glu Val Leu Glu Val Thr Leu Asn Arg Pro Phe Leu Phe Ala Val
 435
 Tyr Asp Gln Ser Ala Thr Ala Leu His Phe Leu Gly Arg Val Ala Asn
 450
 Pro Leu Ser Thr Ala
 465
 470
 475
 480
 485

<210> 192

<211> 279

<212> PRT

<213> Homo sapiens

<400> 192

Met Thr Glu Arg Phe Asp Cys His His Cys Asn Glu Ser Leu Phe Gly
 1
 Lys Lys Tyr Ile Leu Arg Glu Glu Ser Pro Tyr Cys Val Val Cys Phe
 20
 Glu Thr Leu Phe Ala Asn Thr Cys Glu Glu Cys Gly Lys Pro Ile Gly
 35
 Cys Asp Cys Lys Asp Leu Ser Tyr Lys Asp Arg His Trp His Glu Ala
 50
 Cys Phe His Cys Ser Gln Cys Arg Asn Ser Leu Val Asp Lys Pro Phe
 65
 Ala Ala Lys Glu Asp Gln Leu Leu Cys Thr Asp Cys Tyr Ser Asn Glu
 85
 Tyr Ser Ser Lys Cys Gln Glu Cys Lys Lys Thr Ile Met Pro Gly Thr
 100
 Arg Lys Met Glu Tyr Lys Gly Ser Ser Trp His Glu Thr Cys Phe Ile
 115
 Cys His Arg Cys Gln Gln Pro Ile Gly Thr Lys Ser Phe Ile Pro Lys
 130
 Asp Asn Gln Asn Phe Cys Val Pro Cys Tyr Glu Lys Gln His Ala Met
 145
 Gln Cys Val Gln Cys Lys Lys Pro Ile Thr Thr Gly Gly Val Thr Tyr
 165
 Arg Glu Gln Pro Trp His Lys Glu Cys Phe Val Cys Thr Ala Cys Arg
 180
 Lys Gln Leu Ser Gly Gln Arg Phe Thr Ala Arg Asp Asp Phe Ala Tyr
 195
 Cys Leu Asn Cys Phe Cys Asp Leu Tyr Ala Lys Lys Cys Ala Gly Cys
 210
 Thr Asn Pro Ile Ser Gly Leu Gly Gly Thr Lys Tyr Ile Ser Phe Glu
 225
 Glu Arg Gln Trp His Asn Asp Cys Phe Asn Cys Lys Lys Cys Ser Leu
 245
 Ser Leu Val Gly Arg Gly Phe Leu Thr Glu Arg Asp Asp Ile Leu Cys
 260
 Pro Asp Cys Gly Lys Asp Ile
 275

<210> 193

<211> 738
 <212> PRT
 <213> Homo sapiens
 <400> 193
 Met Glu Lys Ser Arg Met Asn Leu Pro Lys Gly Pro Asp Thr Leu Cys
 1 5 10 15
 Phe Asp Lys Asp Glu Phe Met Lys Glu Asp Phe Asp Val Asp His Phe
 20 25 30
 Val Ser Asp Cys Arg Lys Arg Val Gln Leu Glu Glu Leu Arg Asp Asp
 35 40 45
 Leu Glu Leu Tyr Tyr Lys Leu Leu Lys Thr Ala Met Val Glu Leu Ile
 50 55 60
 Asn Lys Asp Tyr Ala Asp Phe Val Asn Leu Ser Thr Asn Leu Val Gly
 65 70 75 80
 Met Asp Lys Ala Leu Asn Gln Leu Ser Val Pro Leu Gly Gln Leu Arg
 85 90 95
 Glu Glu Val Leu Ser Leu Arg Ser Ser Val Ser Glu Gly Ile Arg Ala
 100 105 110
 Val Asp Glu Arg Met Ser Lys Gln Glu Asp Ile Arg Lys Lys Lys Met
 115 120 125
 Cys Val Leu Arg Leu Ile Gln Val Ile Arg Ser Val Glu Lys Ile Glu
 130 135 140
 Lys Ile Leu Asn Ser Gln Ser Ser Lys Glu Thr Ser Ala Leu Glu Ala
 145 150 155 160
 Ser Ser Pro Leu Leu Thr Gly Gln Ile Leu Glu Arg Ile Ala Thr Glu
 165 170 175
 Phe Asn Gln Leu Gln Phe His Ala Val Gln Ser Lys Gly Met Pro Leu
 180 185 190
 Leu Asp Lys Val Arg Pro Arg Ile Ala Gly Ile Thr Ala Met Leu Gln
 195 200 205
 Gln Ser Leu Glu Gly Leu Leu Glu Gly Leu Gln Thr Ser Asp Val
 210 215 220
 Asp Ile Ile Arg His Cys Leu Arg Thr Tyr Ala Thr Ile Asp Lys Thr
 225 230 235 240
 Arg Asp Ala Glu Ala Leu Val Gly Gln Val Leu Val Lys Pro Tyr Ile
 245 250 255
 Asp Glu Val Ile Ile Glu Gln Phe Val Glu Ser His Pro Asn Gly Leu
 260 265 270
 Gln Val Met Tyr Asn Lys Leu Leu Glu Phe Val Pro His His Cys Arg
 275 280 285
 Leu Leu Arg Glu Val Thr Gly Gly Ala Ile Ser Ser Glu Lys Gly Asn
 290 295 300
 Thr Val Pro Gly Tyr Asp Phe Leu Val Asn Ser Val Trp Pro Gln Ile
 305 310 315 320
 Val Gln Gly Leu Glu Lys Leu Pro Ser Leu Phe Asn Pro Gly Asn
 325 330 335
 Pro Asp Ala Phe His Glu Lys Tyr Thr Ile Ser Met Asp Phe Val Arg
 340 345 350
 Arg Leu Glu Arg Gln Cys Gly Ser Gln Ala Ser Val Lys Arg Leu Arg
 355 360 365
 Ala His Pro Ala Tyr His Ser Phe Asn Lys Lys Trp Asn Leu Pro Val
 370 375 380
 Tyr Phe Gln Ile Arg Phe Arg Glu Ile Ala Gly Ser Leu Glu Ala Ala
 385 390 395 400
 Leu Thr Asp Val Leu Glu Asp Ala Pro Ala Glu Ser Pro Tyr Cys Leu
 405 410 415
 Leu Ala Ser His Arg Thr Trp Ser Ser Leu Arg Arg Cys Trp Ser Asp
 420 425 430
 Glu Met Phe Leu Pro Leu Leu Val His Arg Leu Trp Arg Leu Thr Leu
 435 440 445
 Gln Ile Leu Ala Arg Tyr Ser Val Phe Val Asn Glu Leu Ser Leu Arg
 450 455 460
 Pro Ile Ser Asn Glu Ser Pro Lys Glu Ile Lys Lys Pro Leu Val Thr
 465 470 475 480
 Gly Ser Lys Glu Pro Ser Ile Thr Gln Gly Asn Thr Glu Asp Gln Gly
 485 490 495
 Ser Gly Pro Ser Glu Thr Lys Pro Val Val Ser Ile Ser Arg Thr Gln
 500 505 510
 Leu Val Tyr Val Val Ala Asp Leu Asp Lys Leu Gln Glu Gln Leu Pro

515
 Glu Leu Leu Glu Ile Ile Lys Pro Lys Leu Glu Met Ile Gly Phe Lys
 530 535 540
 Asn Phe Ser Ser Ile Ser Ala Ala Leu Glu Asp Ser Gln Ser Ser Phe
 545 550 555 560
 Ser Ala Cys Val Pro Ser Leu Ser Ser Lys Ile Ile Gln Asp Leu Ser
 565 570 575
 Asp Ser Cys Phe Gly Phe Leu Lys Ser Ala Leu Glu Val Pro Arg Leu
 580 585 590
 Tyr Arg Arg Thr Asn Lys Glu Val Pro Thr Thr Ala Ser Ser Tyr Val
 595 600 605
 Asp Ser Ala Leu Lys Pro Leu Phe Gln Leu Gln Ser Gly His Lys Asp
 610 615 620
 Lys Leu Lys Gln Ala Ile Ile Gln Gln Trp Leu Glu Gly Thr Leu Ser
 625 630 635 640
 Glu Ser Thr His Lys Tyr Tyr Glu Thr Val Ser Asp Val Leu Asn Ser
 645 650 655
 Val Lys Lys Met Glu Glu Ser Leu Lys Arg Leu Lys Gln Ala Arg Lys
 660 665 670
 Thr Thr Pro Ala Asn Pro Val Gly Pro Ser Gly Gly Met Ser Asp Asp
 675 680 685
 Asp Lys Ile Arg Leu Gln Leu Ala Leu Asp Val Glu Tyr Leu Gly Glu
 690 695 700
 Gln Ile Gln Lys Leu Gly Leu Gln Ala Ser Asp Ile Lys Ser Phe Ser
 705 710 715 720
 Ala Leu Ala Glu Leu Val Ala Ala Ala Lys Asp Gln Ala Thr Ala Glu
 725 730 735
 Gln Pro

<210> 194

<211> 963

<212> PRT

<213> Homo sapiens

<400> 194

Met Ala Val Phe Pro Trp His Ser Arg Asn Arg Asn Tyr Lys Ala Glu
 1 5 10 15
 Phe Ala Ser Cys Arg Leu Glu Ala Val Pro Leu Glu Phe Gly Asp Tyr
 20 25 30
 His Pro Leu Lys Pro Ile Thr Val Thr Glu Ser Lys Thr Lys Lys Val
 35 40 45
 Asn Arg Lys Gly Ser Thr Ser Ser Thr Ser Ser Ser Ser Ser Ser
 50 55 60
 Val Val Asp Pro Leu Ser Ser Val Leu Asp Gly Thr Asp Pro Leu Ser
 65 70 75 80
 Met Phe Ala Ala Thr Ala Asp Pro Ala Ala Leu Ala Ala Ala Met Asp
 85 90 95
 Ser Ser Arg Arg Lys Arg Asp Arg Asp Asn Ser Val Val Gly Ser
 100 105 110
 Asp Phe Glu Pro Trp Thr Asn Lys Arg Gly Glu Ile Leu Ala Arg Tyr
 115 120 125
 Thr Thr Thr Glu Lys Leu Ser Ile Asn Leu Phe Met Gly Ser Glu Lys
 130 135 140
 Gly Lys Ala Gly Thr Ala Thr Leu Ala Met Ser Glu Lys Val Arg Thr
 145 150 155 160
 Arg Leu Glu Glu Leu Asp Asp Phe Glu Glu Gly Ser Gln Lys Glu Leu
 165 170 175
 Leu Asn Leu Thr Gln Gln Asp Tyr Val Asn Arg Ile Glu Glu Leu Asn
 180 185 190
 Gln Ser Leu Lys Asp Ala Trp Ala Ser Asp Gln Lys Val Lys Ala Leu
 195 200 205
 Lys Ile Val Ile Gln Cys Ser Lys Leu Leu Ser Asp Thr Ser Val Ile
 210 215 220
 Gln Phe Tyr Pro Ser Lys Phe Val Leu Ile Thr Asp Ile Leu Asp Thr
 225 230 235 240
 Phe Gly Lys Leu Val Tyr Glu Arg Ile Phe Ser Met Cys Val Asp Ser
 245 250 255
 Arg Ser Val Leu Pro Asp His Phe Ser Pro Glu Asn Ala Asn Asp Thr
 260 265 270

Ala Lys Glu Thr Cys Leu Asn Trp Phe Phe Lys Ile Ala Ser Ile Arg
 275 280 285
 Glu Leu Ile Pro Arg Phe Tyr Val Glu Ala Ser Ile Leu Lys Cys Asn
 290 295 300
 Lys Phe Leu Ser Lys Thr Gly Ile Ser Glu Cys Leu Pro Arg Leu Thr
 305 310 315 320
 Cys Met Ile Arg Gly Ile Gly Asp Pro Leu Val Ser Val Tyr Ala Arg
 325 330 335
 Ala Tyr Leu Cys Arg Val Gly Met Glu Val Ala Pro His Leu Lys Glu
 340 345 350
 Thr Leu Asn Lys Asn Phe Phe Asp Phe Leu Leu Thr Phe Lys Gln Ile
 355 360 365
 His Gly Asp Thr Val Gln Asn Gln Leu Val Val Gln Gly Val Glu Leu
 370 375 380
 Pro Ser Tyr Leu Pro Leu Tyr Pro Pro Ala Met Asp Trp Ile Phe Gln
 385 390 395 400
 Cys Ile Ser Tyr His Ala Pro Glu Ala Leu Leu Thr Glu Met Met Glu
 405 410 415
 Arg Cys Lys Lys Leu Gly Asn Asn Ala Leu Leu Leu Asn Ser Val Met
 420 425 430
 Ser Ala Phe Arg Ala Glu Phe Ile Ala Thr Arg Ser Met Asp Phe Ile
 435 440 445
 Gly Met Ile Lys Glu Cys Asp Glu Ser Gly Phe Pro Lys His Leu Leu
 450 455 460
 Phe Arg Ser Leu Gly Leu Asn Leu Ala Leu Ala Asp Pro Pro Glu Ser
 465 470 475 480
 Asp Arg Leu Gln Ile Leu Asn Glu Ala Trp Lys Val Ile Thr Lys Leu
 485 490 495
 Lys Asn Pro Gln Asp Tyr Ile Asn Cys Ala Glu Val Trp Val Glu Tyr
 500 505 510
 Thr Cys Lys His Phe Thr Lys Arg Glu Val Asn Thr Val Leu Ala Asp
 515 520 525
 Val Ile Lys His Met Thr Pro Asp Arg Ala Phe Glu Asp Ser Tyr Pro
 530 535 540
 Gln Leu Gln Leu Ile Ile Lys Lys Val Ile Ala His Phe His Asp Phe
 545 550 555 560
 Ser Val Leu Phe Ser Val Glu Lys Phe Leu Pro Phe Leu Asp Met Phe
 565 570 575
 Gln Lys Glu Ser Val Arg Val Glu Val Cys Lys Cys Ile Met Asp Ala
 580 585 590
 Phe Ile Lys His Gln Gln Glu Pro Thr Lys Asp Pro Val Ile Leu Asn
 595 600 605
 Ala Leu Leu His Val Cys Lys Thr Met His Asp Ser Val Asn Ala Leu
 610 615 620
 Thr Leu Glu Asp Glu Lys Arg Met Leu Ser Tyr Leu Ile Asn Gly Phe
 625 630 635 640
 Ile Lys Met Val Ser Phe Gly Arg Asp Phe Glu Gln Gln Leu Ser Phe
 645 650 655
 Tyr Val Glu Ser Arg Ser Met Phe Cys Asn Leu Glu Pro Val Leu Val
 660 665 670
 Gln Leu Ile His Ser Val Asn Arg Leu Ala Met Glu Thr Arg Lys Val
 675 680 685
 Met Lys Gly Asn His Ser Arg Lys Thr Ala Ala Phe Val Arg Ala Cys
 690 695 700
 Val Ala Tyr Cys Phe Ile Thr Ile Pro Ser Leu Ala Gly Ile Phe Thr
 705 710 715 720
 Arg Leu Asn Leu Tyr Leu His Ser Gly Gln Val Ala Leu Ala Asn Gln
 725 730 735
 Cys Leu Ser Gln Ala Asp Ala Phe Phe Lys Ala Ala Ile Ser Leu Val
 740 745 750
 Pro Glu Val Pro Lys Met Ile Asn Ile Asp Gly Lys Met Arg Pro Ser
 755 760 765
 Glu Ser Phe Leu Leu Glu Phe Leu Cys Asn Phe Phe Ser Thr Leu Leu
 770 775 780
 Ile Val Pro Asp His Pro Glu His Gly Val Leu Phe Leu Val Arg Glu
 785 790 795 800
 Leu Leu Asn Val Ile Gln Asp Tyr Thr Trp Glu Asp Asn Ser Asp Glu
 805 810 815
 Lys Ile Arg Ile Tyr Thr Cys Val Leu His Leu Leu Ser Ala Met Ser

820
 Gln Glu Thr Tyr Leu Tyr His Ile Asp Lys Val Asp Ser Asn Asp Ser
 835
 Leu Tyr Gly Gly Asp Ser Lys Phe Leu Ala Glu Asn Asn Lys Leu Cys
 850
 Glu Thr Val Met Ala Gln Ile Leu Glu His Leu Lys Thr Leu Ala Lys
 865
 Asp Glu Ala Leu Lys Arg Gln Ser Ser Leu Gly Leu Ser Phe Phe Asn
 885
 Ser Ile Leu Ala His Gly Asp Leu Arg Asn Asn Lys Leu Asn Gln Leu
 900
 Ser Val Asn Leu Trp His Leu Ala Gln Arg His Gly Cys Ala Asp Thr
 915
 Arg Thr Met Val Lys Thr Leu Glu Tyr Ile Lys Lys Gln Ser Lys Gln
 930
 Pro Asp Met Thr His Leu Thr Glu Leu Ala Leu Arg Leu Pro Leu Gln
 945
 Thr Arg Thr 950 955 960

<210> 195
 <211> 494
 <212> PRT
 <213> Homo sapiens
 <400> 195

Met Phe Glu Ile Lys Lys Ile Cys Cys Ile Gly Ala Gly Tyr Val Gly
 1 5 10
 Gly Pro Thr Cys Ser Val Ile Ala His Met Cys Pro Glu Ile Arg Val
 20 25 30
 Thr Val Val Asp Val Asn Glu Ser Arg Ile Asn Ala Trp Asn Ser Pro
 35 40 45
 Thr Leu Pro Ile Tyr Glu Pro Gly Leu Lys Glu Val Val Glu Ser Cys
 50 55 60
 Arg Gly Lys Asn Leu Phe Phe Ser Thr Asn Ile Asp Asp Ala Ile Lys
 65 70 75 80
 Glu Ala Asp Leu Val Phe Ile Ser Val Asn Thr Pro Thr Lys Thr Tyr
 85 90 95
 Gly Met Gly Lys Gly Arg Ala Ala Asp Leu Lys Tyr Ile Glu Ala Cys
 100 105 110
 Ala Arg Arg Ile Val Gln Asn Ser Asn Gly Tyr Lys Ile Val Thr Glu
 115 120 125
 Lys Ser Thr Val Pro Val Arg Ala Ala Glu Ser Ile Arg Arg Ile Phe
 130 135 140
 Asp Ala Asn Thr Lys Pro Asn Leu Asn Leu Gln Val Leu Ser Asn Pro
 145 150 155 160
 Glu Phe Leu Ala Glu Gly Thr Ala Ile Lys Asp Leu Lys Asn Pro Asp
 165 170 175
 Arg Val Leu Ile Gly Gly Asp Glu Thr Pro Glu Gly Gln Arg Ala Val
 180 185 190
 Gln Ala Leu Cys Ala Val Tyr Glu His Trp Val Pro Arg Glu Lys Ile
 195 200 205
 Leu Thr Thr Asn Thr Trp Ser Ser Glu Leu Ser Lys Leu Ala Ala Asn
 210 215 220
 Ala Phe Leu Ala Gln Arg Ile Ser Ser Ile Asn Ser Ile Ser Ala Leu
 225 230 235 240
 Cys Glu Ala Thr Gly Ala Asp Val Glu Glu Val Ala Thr Ala Ile Gly
 245 250 255
 Met Asp Gln Arg Ile Gly Asn Lys Phe Leu Lys Ala Ser Val Gly Phe
 260 265 270
 Gly Gly Ser Cys Phe Gln Lys Asp Val Leu Asn Leu Val Tyr Leu Cys
 275 280 285
 Glu Ala Leu Asn Leu Pro Glu Val Ala Arg Tyr Trp Gln Gln Val Ile
 290 295 300
 Asp Met Asn Asp Tyr Gln Arg Arg Arg Phe Ala Ser Arg Ile Ile Asp
 305 310 315 320
 Ser Leu Phe Asn Thr Val Thr Asp Lys Lys Ile Ala Ile Leu Gly Phe
 325 330 335
 Ala Phe Lys Lys Asp Thr Gly Asp Thr Arg Glu Ser Ser Ser Ile Tyr
 340 345 350

Ile Ser Lys Tyr Leu Met Asp Glu Gly Ala His Leu His Ile Tyr Asp
 355 360 365
 Pro Lys Val Pro Arg Glu Gln Ile Val Val Asp Leu Ser His Pro Gly
 370 375 380
 Val Ser Glu Asp Asp Gln Val Ser Arg Leu Val Thr Ile Ser Lys Asp
 385 390 395 400
 Pro Tyr Glu Ala Cys Asp Gly Ala His Ala Val Val Ile Cys Thr Glu
 405 410 415
 Trp Asp Met Phe Lys Glu Leu Asp Tyr Glu Arg Ile His Lys Lys Met
 420 425 430
 Leu Lys Pro Ala Phe Ile Phe Asp Gly Arg Arg Val Leu Asp Gly Leu
 435 440 445
 His Asn Glu Leu Gln Thr Ile Gly Phe Gln Ile Glu Thr Ile Gly Lys
 450 455 460
 Lys Val Ser Ser Lys Arg Ile Pro Tyr Ala Pro Ser Gly Glu Ile Pro
 465 470 475 480
 Lys Phe Ser Leu Gln Asp Pro Pro Asn Lys Lys Pro Lys Val
 485 490

<210> 196
 <211> 205
 <212> PRT
 <213> Homo sapiens
 <400> 196

Met Ala Leu Gln Leu Ser Arg Glu Gln Gly Ile Thr Leu Arg Gly Ser
 1 5 10 15
 Ala Glu Ile Val Ala Glu Phe Phe Ser Phe Gly Ile Asn Ser Ile Leu
 20 25 30
 Tyr Gln Arg Gly Ile Tyr Pro Ser Glu Thr Phe Thr Arg Val Gln Lys
 35 40 45
 Tyr Gly Leu Thr Leu Leu Val Thr Thr Asp Leu Glu Leu Ile Lys Tyr
 50 55 60
 Leu Asn Asn Val Val Glu Gln Leu Lys Asp Trp Leu Tyr Lys Cys Ser
 65 70 75 80
 Val Gln Lys Leu Val Val Val Ile Ser Asn Ile Glu Ser Gly Glu Val
 85 90 95
 Leu Glu Arg Trp Gln Phe Asp Ile Glu Cys Asp Lys Thr Ala Lys Asp
 100 105 110
 Asp Ser Ala Pro Arg Glu Lys Ser Gln Lys Ala Ile Gln Asp Glu Ile
 115 120 125
 Arg Ser Val Ile Arg Gln Ile Thr Ala Thr Val Thr Phe Leu Pro Leu
 130 135 140
 Leu Glu Val Ser Cys Ser Phe Asp Leu Leu Ile Tyr Thr Asp Lys Asp
 145 150 155 160
 Leu Val Val Pro Glu Lys Trp Glu Glu Ser Gly Pro Gln Phe Ile Thr
 165 170 175
 Asn Ser Glu Glu Val Arg Leu Arg Ser Phe Thr Thr Thr Ile His Lys
 180 185 190
 Val Asn Ser Met Val Ala Tyr Lys Ile Pro Val Asn Asp
 195 200 205

<210> 197
 <211> 427
 <212> PRT
 <213> Homo sapiens
 <400> 197

Met Ala Pro Lys Lys Arg Pro Glu Thr Gln Lys Thr Ser Glu Ile Val
 1 5 10 15
 Leu Arg Pro Arg Asn Lys Arg Ser Arg Ser Pro Leu Glu Leu Glu Pro
 20 25 30
 Glu Ala Lys Lys Leu Cys Ala Lys Gly Ser Gly Pro Ser Arg Arg Cys
 35 40 45
 Asp Ser Asp Cys Leu Trp Val Gly Leu Ala Gly Pro Gln Ile Leu Pro
 50 55 60
 Pro Cys Arg Ser Ile Val Arg Thr Leu His Gln His Lys Leu Gly Arg
 65 70 75 80
 Ala Ser Trp Pro Ser Val Gln Gln Gly Leu Gln Gln Ser Phe Leu His
 85 90 95
 Thr Leu Asp Ser Tyr Arg Ile Leu Gln Lys Ala Ala Pro Phe Asp Arg

100
 Arg Ala Thr Ser Leu Ala Trp His Pro Thr His Pro Ser Thr Val Ala
 115
 Val Gly Ser Lys Gly Gly Asp Ile Met Leu Trp Asn Phe Gly Ile Lys
 130
 Asp Lys Pro Thr Phe Ile Lys Gly Ile Gly Ala Gly Gly Ser Ile Thr
 145
 Gly Leu Lys Phe Asn Pro Leu Asn Thr Asn Gln Phe Tyr Ala Ser Ser
 165
 Met Glu Gly Thr Thr Arg Leu Gln Asp Phe Lys Gly Asn Ile Leu Arg
 180
 Val Phe Ala Ser Ser Asp Thr Ile Asn Ile Trp Phe Cys Ser Leu Asp
 195
 Val Ser Ala Ser Ser Arg Met Val Val Thr Gly Asp Asn Val Gly Asn
 210
 Val Ile Leu Leu Asn Met Asp Gly Lys Glu Leu Trp Asn Leu Arg Met
 225
 His Lys Lys Lys Val Thr His Val Ala Leu Asn Pro Cys Cys Asp Trp
 245
 Phe Leu Ala Thr Ala Ser Val Asp Gln Thr Val Lys Ile Trp Asp Leu
 260
 Arg Gln Val Arg Gly Lys Ala Ser Phe Leu Tyr Ser Leu Pro His Arg
 275
 His Pro Val Asn Ala Ala Cys Phe Ser Pro Asp Gly Ala Arg Leu Leu
 290
 Thr Thr Asp Gln Lys Ser Glu Ile Arg Val Tyr Ser Ala Ser Gln Trp
 305
 Asp Cys Pro Leu Gly Leu Ile Pro His Pro His Arg His Phe Gln His
 325
 Leu Thr Pro Ile Lys Ala Ala Trp His Pro Arg Tyr Asn Leu Ile Val
 340
 Val Gly Arg Tyr Pro Asp Pro Asn Phe Lys Ser Cys Thr Pro Tyr Glu
 355
 Leu Arg Thr Ile Asp Val Phe Asp Gly Asn Ser Gly Lys Met Met Cys
 370
 Gln Leu Tyr Asp Pro Glu Ser Ser Gly Ile Ser Ser Leu Asn Glu Phe
 385
 Asn Pro Met Gly Asp Thr Leu Ala Ser Ala Met Gly Tyr His Ile Leu
 405
 Ile Trp Ser Gln Glu Glu Ala Arg Thr Arg Lys
 420
 425

<210> 198
 <211> 283
 <212> PRT
 <213> Homo sapiens
 <400> 198

Met Glu His Gly Ser Ile Ile Thr Gln Ala Arg Arg Glu Asp Ala Leu
 1
 Val Leu Thr Lys Gln Gly Leu Val Ser Lys Ser Ser Pro Lys Lys Pro
 20
 Arg Gly Arg Asn Ile Phe Lys Ala Leu Phe Cys Cys Phe Arg Ala Gln
 35
 His Val Gly Gln Ser Ser Ser Thr Glu Leu Ala Ala Tyr Lys Glu
 50
 Glu Ala Asn Thr Ile Ala Lys Ser Asp Leu Leu Gln Cys Leu Gln Tyr
 65
 Gln Phe Tyr Gln Ile Pro Gly Thr Cys Leu Leu Pro Glu Val Thr Glu
 85
 Glu Asp Gln Gly Arg Ile Cys Val Val Ile Asp Leu Asp Glu Thr Leu
 100
 Val His Ser Ser Phe Lys Pro Ile Asn Asn Ala Asp Phe Ile Val Pro
 115
 Ile Glu Ile Glu Gly Thr Thr His Gln Val Tyr Val Leu Lys Arg Pro
 130
 Tyr Val Asp Glu Phe Leu Arg Arg Met Gly Glu Leu Phe Glu Cys Val
 145
 Leu Phe Thr Ala Ser Leu Ala Lys Tyr Ala Asp Pro Val Thr Asp Leu
 165
 170
 175

Leu Asp Arg Cys Gly Val Phe Arg Ala Arg Leu Phe Arg Glu Ser Cys
 180 185 190
 Val Phe His Gln Gly Cys Tyr Val Lys Asp Leu Ser Arg Leu Gly Arg
 195 200 205
 Asp Leu Arg Lys Thr Leu Ile Leu Asp Asn Ser Pro Ala Ser Tyr Ile
 210 215 220
 Phe His Pro Glu Asn Ala Val Pro Val Gln Ser Trp Phe Asp Asp Met
 225 230 235 240
 Ala Asp Thr Glu Leu Leu Asn Leu Ile Pro Ile Phe Glu Glu Leu Ser
 245 250 255
 Gly Ala Glu Asp Val Tyr Thr Ser Leu Gly Ala Ala Ala Gly Pro Leu
 260 265 270
 Ala Cys Pro Ala Ser Lys Arg Arg Pro Ser Gln
 275 280

<210> 199
 <211> 239
 <212> PRT
 <213> Homo sapiens
 <400> 199

Met Ala His Ala Gly Arg Thr Gly Tyr Asp Asn Arg Glu Ile Val Met
 1 5 10 15
 Lys Tyr Ile His Tyr Lys Leu Ser Gln Arg Gly Tyr Glu Trp Asp Ala
 20 25 30
 Gly Asp Val Gly Ala Ala Pro Pro Gly Ala Ala Pro Ala Pro Gly Ile
 35 40 45
 Phe Ser Ser Gln Pro Gly His Thr Pro His Thr Ala Ala Ser Arg Asp
 50 55 60
 Pro Val Ala Arg Thr Ser Pro Leu Gln Thr Pro Ala Ala Pro Gly Ala
 65 70 75 80
 Ala Ala Gly Pro Ala Leu Ser Pro Val Pro Pro Val Val His Leu Thr
 85 90 95
 Leu Arg Gln Ala Gly Asp Asp Phe Ser Arg Arg Tyr Arg Arg Asp Phe
 100 105 110
 Ala Glu Met Ser Arg Gln Leu His Leu Thr Pro Phe Thr Ala Arg Gly
 115 120 125
 Arg Phe Ala Thr Val Val Glu Glu Leu Phe Arg Asp Gly Val Asn Trp
 130 135 140
 Gly Arg Ile Val Ala Phe Glu Phe Gly Gly Val Met Cys Val Glu
 145 150 155 160
 Ser Val Asn Arg Glu Met Ser Pro Leu Val Asp Asn Ile Ala Leu Trp
 165 170 175
 Met Thr Glu Tyr Leu Asn Arg His Leu His Thr Trp Ile Gln Asp Asn
 180 185 190
 Gly Gly Trp Asp Ala Phe Val Glu Leu Tyr Gly Pro Ser Met Arg Pro
 195 200 205
 Leu Phe Asp Phe Ser Trp Leu Ser Leu Lys Thr Leu Leu Ser Leu Ala
 210 215 220
 Leu Val Gly Ala Cys Ile Thr Leu Gly Ala Tyr Leu Gly His Lys
 225 230 235

<210> 200
 <211> 751
 <212> PRT
 <213> Homo sapiens
 <400> 200

Met Ala Phe Arg Thr Ile Cys Val Leu Val Gly Val Phe Ile Cys Ser
 1 5 10 15
 Ile Cys Val Lys Gly Ser Ser Gln Pro Gln Ala Arg Val Tyr Leu Thr
 20 25 30
 Phe Asp Glu Leu Arg Glu Thr Lys Thr Ser Glu Tyr Phe Ser Leu Ser
 35 40 45
 His His Pro Leu Asp Tyr Arg Ile Leu Leu Met Asp Glu Asp Gln Asp
 50 55 60
 Arg Ile Tyr Val Gly Ser Lys Asp His Ile Leu Ser Leu Asn Ile Asn
 65 70 75 80
 Asn Ile Ser Gln Glu Ala Leu Ser Val Phe Trp Pro Ala Ser Thr Ile
 85 90 95
 Lys Val Glu Glu Cys Lys Met Ala Gly Lys Asp Pro Thr His Gly Cys

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Ile Asn Phe Lys Val Leu Asp Ser Glu Met Val Ala Val Val Thr Asp
 660 665 670
 Lys Trp Ser Pro Trp Thr Trp Ala Ser Ser Val Arg Ala Leu Pro Phe
 675 680 685
 His Pro Lys Asp Ile Met Gly Ala Phe Ser His Ser Glu Met Gln Met
 690 695 700
 Ile Asn Gln Tyr Cys Lys Asp Thr Arg Gln Gln His Gln Gln Gly Asp
 705 710 715 720
 Glu Ser Gln Lys Met Arg Gly Asp Tyr Gly Lys Leu Lys Ala Leu Ile
 725 730 735
 Asn Ser Arg Lys Ser Arg Asn Arg Arg Asn Gln Leu Pro Glu Ser
 740 745 750

<210> 201
 <211> 208
 <212> PRT
 <213> Homo sapiens
 <400> 201

Met Lys Leu Leu Pro Ser Val Val Leu Lys Leu Phe Leu Ala Ala Val
 1 5 10 15
 Leu Ser Ala Leu Val Thr Gly Glu Ser Leu Glu Arg Leu Arg Arg Gly
 20 25 30
 Leu Ala Ala Gly Thr Ser Asn Pro Asp Pro Pro Thr Val Ser Thr Asp
 35 40 45
 Gln Leu Leu Pro Leu Gly Gly Gly Arg Asp Arg Lys Val Arg Asp Leu
 50 55 60
 Gln Glu Ala Asp Leu Asp Leu Leu Arg Val Thr Leu Ser Ser Lys Pro
 65 70 75 80
 Gln Ala Leu Ala Thr Pro Asn Lys Glu Glu His Gly Lys Arg Lys Lys
 85 90 95
 Lys Gly Lys Gly Leu Gly Lys Lys Arg Asp Pro Cys Leu Arg Lys Tyr
 100 105 110
 Lys Asp Phe Cys Ile His Gly Glu Cys Lys Tyr Val Lys Glu Leu Arg
 115 120 125
 Ala Pro Ser Cys Ile Cys His Pro Gly Tyr His Gly Glu Arg Cys His
 130 135 140
 Gly Leu Ser Leu Pro Val Glu Asn Arg Leu Tyr Thr Tyr Asp His Thr
 145 150 155 160
 Thr Ile Leu Ala Val Val Ala Val Val Leu Ser Ser Val Cys Leu Leu
 165 170 175
 Val Ile Val Gly Leu Leu Met Phe Arg Tyr His Arg Arg Gly Gly Tyr
 180 185 190
 Asp Val Glu Asn Glu Glu Lys Val Lys Leu Gly Met Thr Asn Ser His
 195 200 205

<210> 202
 <211> 662
 <212> PRT
 <213> Homo sapiens
 <400> 202

Met Arg Pro Gln Ile Leu Leu Leu Leu Ala Leu Leu Thr Leu Gly Leu
 1 5 10 15
 Ala Ala Gln His Gln Asp Lys Val Pro Cys Lys Met Val Asp Lys Lys
 20 25 30
 Val Ser Cys Gln Val Leu Gly Leu Leu Gln Val Pro Ser Val Leu Pro
 35 40 45
 Pro Asp Thr Glu Thr Leu Asp Leu Ser Gly Asn Gln Leu Arg Ser Ile
 50 55 60
 Leu Ala Ser Pro Leu Gly Phe Tyr Thr Ala Leu Arg His Leu Asp Leu
 65 70 75 80
 Ser Thr Asn Glu Ile Ser Phe Leu Gln Pro Gly Ala Phe Gln Ala Leu
 85 90 95
 Thr His Leu Glu His Leu Ser Leu Ala His Asn Arg Leu Ala Met Ala
 100 105 110
 Thr Ala Leu Ser Ala Gly Gly Leu Gly Pro Leu Pro Arg Val Thr Ser
 115 120 125
 Leu Asp Leu Ser Gly Asn Ser Leu Tyr Ser Gly Leu Leu Glu Arg Leu
 130 135 140
 Leu Gly Glu Ala Pro Ser Leu His Thr Leu Ser Leu Ala Glu Asn Ser

<210>	203
<211>	1036
<212>	PRT

<213> Homo sapiens
 <400> 203
 Met Gln Pro Glu Glu Gly Thr Gly Trp Leu Leu Glu Leu Leu Ser Glu
 1 5 10 15
 Val Gln Leu Gln Gln Tyr Phe Leu Arg Leu Arg Asp Asp Leu Asn Val
 20 25 30
 Thr Arg Leu Ser His Phe Glu Tyr Val Lys Asn Glu Asp Leu Glu Lys
 35 40 45
 Ile Gly Met Gly Arg Pro Gly Gln Arg Arg Leu Trp Glu Ala Val Lys
 50 55 60
 Arg Arg Lys Ala Leu Cys Lys Arg Lys Ser Trp Met Ser Lys Val Phe
 65 70 75 80
 Ser Gly Lys Arg Leu Glu Ala Glu Phe Pro Pro His His Ser Gln Ser
 85 90 95
 Thr Phe Arg Lys Thr Ser Pro Ala Pro Gly Gly Pro Ala Gly Glu Gly
 100 105 110
 Pro Leu Gln Ser Leu Thr Cys Leu Ile Gly Glu Lys Asp Leu Arg Leu
 115 120 125
 Leu Glu Lys Leu Gly Asp Gly Ser Phe Gly Val Val Arg Arg Gly Glu
 130 135 140
 Trp Asp Ala Pro Ser Gly Lys Thr Val Ser Val Ala Val Lys Cys Leu
 145 150 155 160
 Lys Pro Asp Val Leu Ser Gln Pro Glu Ala Met Asp Asp Phe Ile Arg
 165 170 175
 Glu Val Asn Ala Met His Ser Leu Asp His Arg Asn Leu Ile Arg Leu
 180 185 190
 Tyr Gly Val Val Leu Thr Pro Pro Met Lys Met Val Thr Glu Leu Ala
 195 200 205
 Pro Leu Gly Ser Leu Leu Asp Arg Leu Arg Lys His Gln Gly His Phe
 210 215 220
 Leu Leu Gly Thr Leu Ser Arg Tyr Ala Val Gln Val Ala Glu Gly Met
 225 230 235 240
 Gly Tyr Leu Glu Ser Lys Arg Phe Ile His Arg Asp Leu Ala Ala Arg
 245 250 255
 Asn Leu Leu Leu Ala Thr Arg Asp Leu Val Lys Ile Gly Asp Phe Gly
 260 265 270
 Leu Met Arg Ala Leu Pro Gln Asn Asp Asp His Tyr Val Met Gln Glu
 275 280 285
 His Arg Lys Val Pro Phe Ala Trp Cys Ala Pro Glu Ser Leu Lys Thr
 290 295 300
 Arg Thr Phe Ser His Ala Ser Asp Thr Trp Met Phe Gly Val Thr Leu
 305 310 315 320
 Trp Glu Met Phe Thr Tyr Gly Gln Glu Pro Trp Ile Gly Leu Asn Gly
 325 330 335
 Ser Gln Ile Leu His Lys Ile Asp Lys Glu Gly Glu Arg Leu Pro Arg
 340 345 350
 Pro Glu Asp Cys Pro Gln Asp Ile Tyr Asn Val Met Val Gln Cys Trp
 355 360 365
 Ala His Lys Pro Glu Asp Arg Pro Thr Phe Val Ala Leu Arg Asp Phe
 370 375 380
 Leu Leu Glu Ala Gln Pro Thr Asp Met Arg Ala Leu Gln Asp Phe Glu
 385 390 395 400
 Glu Pro Asp Lys Leu His Ile Gln Met Asn Asp Val Ile Thr Val Ile
 405 410 415
 Glu Gly Arg Ala Glu Asn Tyr Trp Trp Arg Gly Gln Asn Thr Arg Thr
 420 425 430
 Leu Cys Val Gly Pro Phe Pro Arg Asn Val Val Thr Ser Val Ala Gly
 435 440 445
 Leu Ser Ala Gln Asp Ile Ser Gln Pro Leu Gln Asn Ser Phe Ile His
 450 455 460
 Thr Gly His Gly Asp Ser Asp Pro Arg His Cys Trp Gly Phe Pro Asp
 465 470 475 480
 Arg Ile Asp Glu Leu Tyr Leu Gly Asn Pro Met Asp Pro Pro Asp Leu
 485 490 495
 Leu Ser Val Glu Leu Ser Thr Ser Arg Pro Pro Gln His Leu Gly Gly
 500 505 510
 Val Lys Lys Pro Thr Tyr Asp Pro Val Ser Glu Asp Gln Asp Pro Leu
 515 520 525
 Ser Ser Asp Phe Lys Arg Leu Gly Leu Arg Lys Pro Gly Leu Pro Arg

530
 Gly Leu Trp Leu Ala Lys Pro Ser Ala Arg Val 540
 545 Ser Arg Gly Ser Gly 550 555 Pro Gly Thr Lys Ala
 565 570 575
 Pro Val Val Pro Ala Leu Arg Pro Cys Pro Pro Ser Leu Ala Gln Leu
 580 585 590
 Ala Met Asp Ala Cys Ser Leu Leu Asp Glu Thr Pro Pro Gln Ser Pro
 595 600 605
 Thr Arg Ala Leu Pro Arg Pro Leu His Pro Thr Pro Val Val Asp Trp
 610 615 620
 Asp Ala Arg Pro Leu Pro Pro Pro Pro Ala Tyr Asp Asp Val Ala Gln
 625 630 635 640
 Asp Glu Asp Asp Phe Glu Ile Cys Ser Ile Asn Ser Thr Leu Val Gly
 645 650 655
 Ala Gly Val Pro Ala Gly Pro Ser Gln Gly Gln Thr Asn Tyr Ala Phe
 660 665 670
 Val Pro Glu Gln Ala Arg Pro Pro Pro Pro Leu Glu Asp Asn Leu Phe
 675 680 685
 Leu Pro Pro Gln Gly Gly Gly Lys Pro Pro Ser Ser Ala Gln Thr Ala
 690 695 700
 Glu Ile Phe Gln Ala Leu Gln Gln Glu Cys Met Arg Gln Leu Gln Ala
 705 710 715 720
 Pro Gly Ser Pro Ala Pro Ser Pro Ser Pro Gly Gly Asp Asp Lys Pro
 725 730 735
 Gln Val Pro Pro Arg Val Pro Ile Pro Pro Arg Pro Thr Arg Pro His
 740 745 750
 Val Gln Leu Ser Pro Ala Pro Pro Gly Glu Glu Glu Thr Ser Gln Trp
 755 760 765
 Pro Gly Pro Ala Ser Pro Pro Arg Val Pro Pro Arg Glu Pro Leu Ser
 770 775 780
 Pro Gln Gly Ser Arg Thr Pro Ser Pro Leu Val Pro Pro Gly Ser Ser
 785 790 795 800
 Pro Leu Pro Pro Arg Leu Ser Ser Ser Pro Gly Lys Thr Met Pro Thr
 805 810 815
 Thr Gln Ser Phe Ala Ser Asp Pro Lys Tyr Ala Thr Pro Gln Val Ile
 820 825 830
 Gln Ala Pro Gly Ala Gly Gly Pro Cys Ile Leu Pro Ile Val Arg Asp
 835 840 845
 Gly Lys Lys Val Ser Ser Thr His Tyr Tyr Leu Leu Pro Glu Arg Pro
 850 855 860
 Ser Tyr Leu Glu Arg Tyr Gln Arg Phe Leu Arg Glu Ala Gln Ser Pro
 865 870 875 880
 Glu Glu Pro Thr Pro Leu Pro Val Pro Leu Leu Leu Pro Pro Pro Ser
 885 890 895
 Thr Pro Ala Pro Ala Ala Pro Thr Ala Thr Val Arg Pro Met Pro Gln
 900 905 910
 Ala Ala Leu Asp Pro Lys Ala Asn Phe Ser Thr Asn Asn Ser Asn Pro
 915 920 925
 Gly Ala Arg Pro Pro Pro Pro Arg Ala Thr Ala Arg Leu Pro Gln Arg
 930 935 940
 Gly Cys Pro Gly Asp Gly Pro Glu Ala Gly Arg Pro Ala Asp Lys Ile
 945 950 955 960
 Gln Met Ala Met Val His Gly Val Thr Thr Glu Glu Cys Gln Ala Ala
 965 970 975
 Leu Gln Cys His Gly Trp Ser Val Gln Arg Ala Ala Gln Tyr Leu Lys
 980 985 990
 Val Glu Gln Leu Phe Gly Leu Gly Leu Arg Pro Arg Gly Glu Cys His
 995 1000 1005
 Lys Val Leu Glu Met Phe Asp Trp Asn Leu Glu Gln Ala Gly Cys
 1010 1015 1020
 His Leu Leu Gly Ser Trp Gly Pro Ala His His Lys Arg
 1025 1030 1035

<210> 204
 <211> 364
 <212> PRT
 <213> Homo sapiens
 <400> 204

Met Ala Ala Ile Ser Thr Ser Ile Pro Val Ile Ser Gln Pro Gln Phe
 1 5 10 15
 Thr Ala Met Asn Glu Pro Gln Cys Phe Tyr Asn Glu Ser Ile Ala Phe
 20 25 30
 Phe Tyr Asn Arg Ser Gly Lys His Leu Ala Thr Glu Trp Asn Thr Val
 35 40 45
 Ser Lys Leu Val Met Gly Leu Gly Ile Thr Val Cys Ile Phe Ile Met
 50 55 60
 Leu Ala Asn Leu Leu Val Met Val Ala Ile Tyr Val Asn Arg Arg Phe
 65 70 75 80
 His Phe Pro Ile Tyr Tyr Leu Met Ala Asn Leu Ala Ala Ala Asp Phe
 85 90 95
 Phe Ala Gly Leu Ala Tyr Phe Tyr Leu Met Phe Asn Thr Gly Pro Asn
 100 105 110
 Thr Arg Arg Leu Thr Val Ser Thr Trp Leu Leu Arg Gln Gly Leu Ile
 115 120 125
 Asp Thr Ser Leu Thr Ala Ser Val Ala Asn Leu Leu Ala Ile Ala Ile
 130 135 140
 Glu Arg His Ile Thr Val Phe Arg Met Gln Leu His Thr Arg Met Ser
 145 150 155 160
 Asn Arg Arg Val Val Val Val Ile Val Val Ile Trp Thr Met Ala Ile
 165 170 175
 Val Met Gly Ala Ile Pro Ser Val Gly Trp Asn Cys Ile Cys Asp Ile
 180 185 190
 Glu Asn Cys Ser Asn Met Ala Pro Leu Tyr Ser Asp Ser Tyr Leu Val
 195 200 205
 Phe Trp Ala Ile Phe Asn Leu Val Thr Phe Val Val Met Val Val Leu
 210 215 220
 Tyr Ala His Ile Phe Gly Tyr Val Arg Gln Arg Thr Met Arg Met Ser
 225 230 235 240
 Arg His Ser Ser Gly Pro Arg Arg Asn Arg Asp Thr Met Met Ser Leu
 245 250 255
 Leu Lys Thr Val Val Ile Val Leu Gly Ala Phe Ile Ile Cys Trp Thr
 260 265 270
 Pro Gly Leu Val Leu Leu Leu Leu Asp Val Cys Cys Pro Gln Cys Asp
 275 280 285
 Val Leu Ala Tyr Glu Lys Phe Phe Leu Leu Leu Ala Glu Phe Asn Ser
 290 295 300
 Ala Met Asn Pro Ile Ile Tyr Ser Tyr Arg Asp Lys Glu Met Ser Ala
 305 310 315 320
 Thr Phe Arg Gln Ile Leu Cys Cys Gln Arg Ser Glu Asn Pro Thr Gly
 325 330 335
 Pro Thr Glu Gly Ser Asp Arg Ser Ala Ser Ser Leu Asn His Thr Ile
 340 345 350
 Leu Ala Gly Val His Ser Asn Asp His Ser Val Val
 355 360

<210> 205

<211> 164

<212> PRT

<213> Homo sapiens

<400> 205

Met Ala Ser Pro His Gln Glu Pro Lys Pro Gly Asp Leu Ile Glu Ile
 1 5 10 15
 Phe Arg Leu Gly Tyr Glu His Trp Ala Leu Tyr Ile Gly Asp Gly Tyr
 20 25 30
 Val Ile His Leu Ala Pro Pro Ser Glu Tyr Pro Gly Ala Gly Ser Ser
 35 40 45
 Ser Val Phe Ser Val Leu Ser Asn Ser Ala Glu Val Lys Arg Gly Arg
 50 55 60
 Leu Glu Asp Val Val Gly Gly Cys Cys Tyr Arg Val Asn Asn Ser Leu
 65 70 75 80
 Asp His Glu Tyr Gln Pro Arg Pro Val Glu Val Ile Ile Ser Ser Ala
 85 90 95
 Lys Glu Met Val Gly Gln Lys Met Lys Tyr Ser Ile Val Ser Arg Asn
 100 105 110
 Cys Glu His Phe Val Ala Gln Leu Arg Tyr Gly Lys Ser Arg Cys Lys
 115 120 125
 Gln Val Glu Lys Ala Lys Val Glu Val Gly Val Ala Thr Ala Leu Gly

130
 Ile Leu Val Val Ala Gly 135
 145 Cys Ser Phe Ala Ile 140
 Lys Ala Thr Ala 150 155 Arg Arg Tyr Gln Lys
 160

<210> 206
 <211> 323
 <212> PRT
 <213> Homo sapiens
 <400> 206

Met Tyr His Asn Ser Ser Gln Lys Arg His Trp Thr Phe Ser Ser Glu
 1 5 10 15
 Glu Gln Leu Ala Arg Leu Arg Ala Asp Ala Asn Arg Lys Phe Arg Cys
 20 25 30
 Lys Ala Val Ala Asn Gly Lys Val Leu Pro Asn Asp Pro Val Phe Leu
 35 40 45
 Glu Pro His Glu Glu Met Thr Leu Cys Lys Tyr Tyr Glu Lys Arg Leu
 50 55 60
 Leu Glu Phe Cys Ser Val Phe Lys Pro Ala Met Pro Arg Ser Val Val
 65 70 75 80
 Gly Thr Ala Cys Met Tyr Phe Lys Arg Phe Tyr Leu Asn Asn Ser Val
 85 90 95
 Met Glu Tyr His Pro Arg Ile Ile Met Leu Thr Cys Ala Phe Leu Ala
 100 105 110
 Cys Lys Val Asp Glu Phe Asn Val Ser Ser Pro Gln Phe Val Gly Asn
 115 120 125
 Leu Arg Glu Ser Pro Leu Gly Gln Glu Lys Ala Leu Glu Gln Ile Leu
 130 135 140
 Glu Tyr Glu Leu Leu Ile Gln Gln Leu Asn Phe His Leu Ile Val
 145 150 155 160
 His Asn Pro Tyr Arg Pro Phe Glu Gly Phe Leu Ile Asp Leu Lys Thr
 165 170 175
 Arg Tyr Pro Ile Leu Glu Asn Pro Glu Ile Leu Arg Lys Thr Ala Asp
 180 185 190
 Asp Phe Leu Asn Arg Ile Ala Leu Thr Asp Ala Tyr Leu Leu Tyr Thr
 195 200 205
 Pro Ser Gln Ile Ala Leu Thr Ala Ile Leu Ser Ser Ala Ser Arg Ala
 210 215 220
 Gly Ile Thr Met Glu Ser Tyr Leu Ser Glu Ser Leu Met Leu Lys Glu
 225 230 235 240
 Asn Arg Thr Cys Leu Ser Gln Leu Leu Asp Ile Met Lys Ser Met Arg
 245 250 255
 Asn Leu Val Lys Lys Tyr Glu Pro Pro Arg Ser Glu Glu Val Ala Val
 260 265 270
 Leu Lys Gln Lys Leu Glu Arg Cys His Ser Ala Glu Leu Ala Leu Asn
 275 280 285
 Val Ile Thr Lys Lys Arg Lys Gly Tyr Glu Asp Asp Tyr Val Ser
 290 295 300
 Lys Lys Ser Lys His Glu Glu Glu Trp Thr Asp Asp Asp Leu Val
 305 310 315 320
 Glu Ser Leu

<210> 207
 <211> 710
 <212> PRT
 <213> Homo sapiens
 <400> 207

Met Leu Ser Phe Gln Tyr Pro Asp Val Tyr Arg Asp Glu Thr Ala Val
 1 5 10 15
 Gln Asp Tyr His Gly His Lys Ile Cys Asp Pro Tyr Ala Trp Leu Glu
 20 25 30
 Asp Pro Asp Ser Glu Gln Thr Lys Ala Phe Val Glu Ala Gln Asn Lys
 35 40 45
 Ile Thr Val Pro Phe Leu Glu Gln Cys Pro Ile Arg Gly Leu Tyr Lys
 50 55 60
 Glu Arg Met Thr Glu Leu Tyr Asp Tyr Pro Lys Tyr Ser Cys His Phe
 65 70 75 80

Lys Lys Gly Lys Arg Tyr Phe Tyr Phe Tyr Asn Thr Gly Leu Gln Asn
 85 90 95
 Gln Arg Val Leu Tyr Val Gln Asp Ser Leu Glu Gly Glu Ala Arg Val
 100 105 110
 Phe Leu Asp Pro Asn Ile Leu Ser Asp Asp Gly Thr Val Ala Leu Arg
 115 120 125
 Gly Tyr Ala Phe Ser Glu Asp Gly Glu Tyr Phe Ala Tyr Gly Leu Ser
 130 135 140
 Ala Ser Gly Ser Asp Trp Val Thr Ile Lys Phe Met Lys Val Asp Gly
 145 150 155 160
 Ala Lys Glu Leu Pro Asp Val Leu Glu Arg Val Lys Phe Ser Cys Met
 165 170 175
 Ala Trp Thr His Asp Gly Lys Gly Met Phe Tyr Asn Ser Tyr Pro Gln
 180 185 190
 Gln Asp Gly Lys Ser Asp Gly Thr Glu Thr Ser Thr Asn Leu His Gln
 195 200 205
 Lys Leu Tyr Tyr His Val Leu Gly Thr Asp Gln Ser Glu Asp Ile Leu
 210 215 220
 Cys Ala Glu Phe Pro Asp Glu Pro Lys Trp Met Gly Gly Ala Glu Leu
 225 230 235 240
 Ser Asp Asp Gly Arg Tyr Val Leu Leu Ser Ile Arg Glu Gly Cys Asp
 245 250 255
 Pro Val Asn Arg Leu Trp Tyr Cys Asp Leu Gln Gln Glu Ser Ser Gly
 260 265 270
 Ile Ala Gly Ile Leu Lys Trp Val Lys Leu Ile Asp Asn Phe Glu Gly
 275 280 285
 Glu Tyr Asp Tyr Val Thr Asn Glu Gly Ala Val Phe Thr Phe Lys Thr
 290 295 300
 Asn Arg Gln Ser Pro Asn Tyr Arg Val Ile Asn Ile Asp Phe Arg Asp
 305 310 315 320
 Pro Glu Glu Ser Lys Trp Lys Val Leu Val Pro Glu His Glu Lys Asp
 325 330 335
 Val Leu Glu Trp Ile Ala Cys Val Arg Ser Asn Phe Leu Val Leu Cys
 340 345 350
 Tyr Leu His Asp Val Lys Asn Ile Leu Gln Leu His Asp Leu Thr Thr
 355 360 365
 Gly Ala Leu Leu Lys Thr Phe Pro Leu Asp Val Gly Ser Ile Val Gly
 370 375 380
 Tyr Ser Gly Gln Lys Lys Asp Thr Glu Ile Phe Tyr Gln Phe Thr Ser
 385 390 395 400
 Phe Leu Ser Pro Gly Ile Ile Tyr His Cys Asp Leu Thr Lys Glu Glu
 405 410 415
 Leu Glu Pro Arg Val Phe Arg Glu Val Thr Val Lys Gly Ile Asp Ala
 420 425 430
 Ser Asp Tyr Gln Thr Val Gln Ile Phe Tyr Pro Ser Lys Asp Gly Thr
 435 440 445
 Lys Ile Pro Met Phe Ile Val His Lys Lys Ser Ile Lys Leu Asp Gly
 450 455 460
 Ser His Pro Ala Phe Leu Tyr Gly Tyr Gly Gly Phe Asn Ile Ser Ile
 465 470 475 480
 Thr Pro Asn Tyr Ser Val Ser Arg Leu Ile Phe Val Arg His Met Gly
 485 490 495
 Gly Ile Leu Ala Val Ala Asn Ile Arg Gly Gly Gly Glu Tyr Gly Glu
 500 505 510
 Thr Trp His Lys Gly Gly Ile Leu Ala Asn Lys Gln Asn Cys Phe Asp
 515 520 525
 Asp Phe Gln Cys Ala Ala Glu Tyr Leu Ile Lys Glu Gly Tyr Thr Ser
 530 535 540
 Pro Lys Arg Leu Thr Ile Asn Gly Gly Ser Asn Gly Gly Leu Leu Val
 545 550 555 560
 Ala Ala Cys Ala Asn Gln Arg Pro Asp Leu Phe Gly Cys Val Ile Ala
 565 570 575
 Gln Val Gly Val Met Asp Met Leu Lys Phe His Lys Tyr Thr Ile Gly
 580 585 590
 His Ala Trp Thr Thr Asp Tyr Gly Cys Ser Asp Ser Lys Gln His Phe
 595 600 605
 Glu Trp Leu Val Lys Tyr Ser Pro Leu His Asn Val Lys Leu Pro Glu
 610 615 620
 Ala Asp Asp Ile Gln Tyr Pro Ser Met Leu Leu Leu Thr Ala Asp His

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Asn Gly His Gly Ala Tyr Gly Glu Lys Gly Gln Lys Gly Glu Pro Ala
 420 425 430
 Val Val Glu Pro Gly Met Leu Val Glu Gly Pro Pro Gly Pro Ala Gly
 435 440 445
 Pro Ala Gly Ile Met Gly Pro Gly Leu Gln Gly Pro Thr Gly Pro
 450 455 460
 Pro Gly Asp Pro Gly Asp Arg Gly Pro Pro Gly Arg Pro Gly Leu Pro
 465 470 475 480
 Gly Ala Asp Gly Leu Pro Gly Pro Pro Gly Thr Met Leu Met Leu Pro
 485 490 495
 Phe Arg Tyr Gly Gly Asp Gly Ser Lys Gly Pro Thr Ile Ser Ala Gln
 500 505 510
 Glu Ala Gln Ala Gln Ala Ile Leu Gln Gln Ala Arg Ile Ala Leu Arg
 515 520 525
 Gly Pro Pro Gly Pro Met Gly Leu Thr Gly Arg Pro Gly Pro Val Gly
 530 535 540
 Gly Pro Gly Ser Ser Gly Ala Lys Gly Glu Ser Gly Asp Pro Gly Pro
 545 550 555 560
 Gln Gly Pro Arg Gly Val Gln Gly Pro Pro Gly Pro Thr Gly Lys Pro
 565 570 575
 Gly Lys Arg Gly Arg Pro Gly Ala Asp Gly Gly Arg Gly Met Pro Gly
 580 585 590
 Glu Pro Gly Ala Lys Gly Asp Arg Gly Phe Asp Gly Leu Pro Gly Leu
 595 600 605
 Pro Gly Asp Lys Gly His Arg Gly Glu Arg Gly Pro Gln Gly Pro Pro
 610 615 620
 Gly Pro Pro Gly Asp Asp Gly Met Arg Gly Glu Asp Gly Glu Ile Gly
 625 630 635 640
 Pro Arg Gly Leu Pro Gly Glu Ala Gly Pro Arg Gly Leu Leu Gly Pro
 645 650 655
 Arg Gly Thr Pro Gly Ala Pro Gly Gln Pro Gly Met Ala Gly Val Asp
 660 665 670
 Gly Pro Pro Gly Pro Lys Gly Asn Met Gly Pro Gln Gly Glu Pro Gly
 675 680 685
 Pro Pro Gly Gln Gln Gly Asn Pro Gly Pro Gln Gly Leu Pro Gly Pro
 690 695 700
 Gln Gly Pro Ile Gly Pro Pro Gly Glu Lys Gly Pro Gln Gly Lys Pro
 705 710 715 720
 Gly Leu Ala Gly Leu Pro Gly Ala Asp Gly Pro Pro Gly His Pro Gly
 725 730 735
 Lys Glu Gly Gln Ser Gly Glu Lys Gly Ala Leu Gly Pro Pro Gly Pro
 740 745 750
 Gln Gly Pro Ile Gly Tyr Pro Gly Pro Arg Gly Val Lys Gly Ala Asp
 755 760 765
 Gly Val Arg Gly Leu Lys Gly Ser Lys Gly Glu Lys Gly Glu Asp Gly
 770 775 780
 Phe Pro Gly Phe Lys Gly Asp Met Gly Leu Lys Gly Asp Arg Gly Glu
 785 790 795 800
 Val Gly Gln Ile Gly Pro Arg Gly Glu Asp Gly Pro Glu Gly Pro Lys
 805 810 815
 Gly Arg Ala Gly Pro Thr Gly Asp Pro Gly Pro Ser Gly Gln Ala Gly
 820 825 830
 Glu Lys Gly Lys Leu Gly Val Pro Gly Leu Pro Gly Tyr Pro Gly Arg
 835 840 845
 Gln Gly Pro Lys Gly Ser Thr Gly Phe Pro Gly Phe Pro Gly Ala Asn
 850 855 860
 Gly Glu Lys Gly Ala Arg Gly Val Ala Gly Lys Pro Gly Pro Arg Gly
 865 870 875 880
 Gln Arg Gly Pro Thr Gly Pro Arg Gly Ser Arg Gly Ala Arg Gly Pro
 885 890 895
 Thr Gly Lys Pro Gly Pro Lys Gly Thr Ser Gly Gly Asp Gly Pro Pro
 900 905 910
 Gly Pro Pro Gly Glu Arg Gly Pro Gln Gly Pro Gln Gly Pro Val Gly
 915 920 925
 Phe Pro Gly Pro Lys Gly Pro Pro Gly Pro Pro Gly Arg Met Gly Cys
 930 935 940
 Pro Gly His Pro Gly Gln Arg Gly Glu Thr Gly Phe Gln Gly Lys Thr
 945 950 955 960
 Gly Pro Pro Gly Pro Gly Gly Val Val Gly Pro Gln Gly Pro Thr Gly

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Gly	Ile	Pro	Gly	Pro	Ala	Gly	Pro	Leu	Gly	Pro	Pro	Gly	Pro	Pro
1490						1495					1500			
Gly	Leu	Pro	Gly	Pro	Gln	Gly	Pro	Lys	Gly	Asn	Lys	Gly	Ser	Thr
1505						1510					1515			
Gly	Pro	Ala	Gly	Gln	Lys	Gly	Asp	Ser	Gly	Leu	Pro	Gly	Pro	Pro
1520						1525					1530			
Gly	Pro	Pro	Gly	Pro	Pro	Gly	Glu	Val	Ile	Gln	Pro	Leu	Pro	Ile
1535						1540					1545			
Leu	Ser	Ser	Lys	Lys	Thr	Arg	Arg	His	Thr	Glu	Gly	Met	Gln	Ala
1550						1555					1560			
Asp	Ala	Asp	Asp	Asn	Ile	Leu	Asp	Tyr	Ser	Asp	Gly	Met	Glu	Glu
1565						1570					1575			
Ile	Phe	Gly	Ser	Leu	Asn	Ser	Leu	Lys	Gln	Asp	Ile	Glu	His	Met
1580						1585					1590			
Lys	Phe	Pro	Met	Gly	Thr	Gln	Thr	Asn	Pro	Ala	Arg	Thr	Cys	Lys
1595						1600					1605			
Asp	Leu	Gln	Leu	Ser	His	Pro	Asp	Phe	Pro	Asp	Gly	Glu	Tyr	Trp
1610						1615					1620			
Ile	Asp	Pro	Asn	Gln	Gly	Cys	Ser	Gly	Asp	Ser	Phe	Lys	Val	Tyr
1625						1630					1635			
Cys	Asn	Phe	Thr	Ser	Gly	Gly	Glu	Thr	Cys	Ile	Tyr	Pro	Asp	Lys
1640						1645					1650			
Lys	Ser	Glu	Gly	Val	Arg	Ile	Ser	Ser	Trp	Pro	Lys	Glu	Lys	Pro
1655						1660					1665			
Gly	Ser	Trp	Phe	Ser	Glu	Phe	Lys	Arg	Gly	Lys	Leu	Leu	Ser	Tyr
1670						1675					1680			
Leu	Asp	Val	Glu	Gly	Asn	Ser	Ile	Asn	Met	Val	Gln	Met	Thr	Phe
1685						1690					1695			
Leu	Lys	Leu	Leu	Thr	Ala	Ser	Ala	Arg	Gln	Asn	Phe	Thr	Tyr	His
1700						1705					1710			
Cys	His	Gln	Ser	Ala	Ala	Trp	Tyr	Asp	Val	Ser	Ser	Gly	Ser	Tyr
1715						1720					1725			
Asp	Lys	Ala	Leu	Arg	Phe	Leu	Gly	Ser	Asn	Asp	Glu	Glu	Met	Ser
1730						1735					1740			
Tyr	Asp	Asn	Asn	Pro	Phe	Ile	Lys	Thr	Leu	Tyr	Asp	Gly	Cys	Thr
1745						1750					1755			
Ser	Arg	Lys	Gly	Tyr	Glu	Lys	Thr	Val	Ile	Glu	Ile	Asn	Thr	Pro
1760						1765					1770			
Lys	Ile	Asp	Gln	Val	Pro	Ile	Val	Asp	Val	Met	Ile	Asn	Asp	Phe
1775						1780					1785			
Gly	Asp	Gln	Asn	Gln	Lys	Phe	Gly	Phe	Glu	Val	Gly	Pro	Val	Cys
1790						1795					1800			
Phe	Leu	Gly												
1805														

<210> 209
 <211> 669
 <212> PRT
 <213> Homo sapiens
 <400> 209

Met	Thr	Ala	Ala	Ala	Gly	Ser	Ala	Gly	Arg	Ala	Ala	Val	Pro	Leu	Leu
1				5					10					15	
Leu	Cys	Ala	Leu	Leu	Ala	Pro	Gly	Gly	Ala	Tyr	Val	Leu	Asp	Asp	Ser
			20					25					30		
Asp	Gly	Leu	Gly	Arg	Glu	Phe	Asp	Gly	Ile	Gly	Ala	Val	Ser	Gly	Gly
		35					40					45			
Gly	Ala	Thr	Ser	Arg	Leu	Leu	Val	Asn	Tyr	Pro	Glu	Pro	Tyr	Arg	Ser
		50				55					60				
Gln	Ile	Leu	Asp	Tyr	Leu	Phe	Lys	Pro	Asn	Phe	Gly	Ala	Ser	Leu	His
65					70				75					80	
Ile	Leu	Lys	Val	Glu	Ile	Gly	Gly	Asp	Gly	Gln	Thr	Thr	Asp	Gly	Thr
			85					90					95		
Glu	Pro	Ser	His	Met	His	Tyr	Ala	Leu	Asp	Glu	Asn	Tyr	Phe	Arg	Gly
			100					105					110		
Tyr	Glu	Trp	Trp	Leu	Met	Lys	Glu	Ala	Lys	Lys	Arg	Asn	Pro	Asn	Ile
		115					120						125		
Thr	Leu	Ile	Gly	Leu	Pro	Trp	Ser	Phe	Pro	Gly	Trp	Leu	Gly	Lys	Gly
	130					135					140				
Phe	Asp	Trp	Pro	Tyr	Val	Asn	Leu	Gln	Leu	Thr	Ala	Tyr	Tyr	Val	Val

145 Thr Trp Ile Val Gly 150 Ala Lys Arg Tyr His 155 Asp Leu Asp Ile Asp 160 Tyr
 165 Ile Gly Ile Trp Asn Glu Arg Ser Tyr Asn Ala Asn Tyr Ile Lys Ile 175
 180 Leu Arg Lys Met Leu Asn Tyr Gln Gly Leu Gln Arg Val Lys Ile Ile 190
 195 Ala Ser Asp Asn Leu Trp Glu Ser Ile Ser Ala Ser Met Leu Leu Asp 205
 210 Ala Glu Leu Phe Lys Val Val Asp Val Ile Gly Ala His Tyr Pro Gly 220
 225 Thr His Ser Ala Lys Asp Ala Lys Leu Thr Gly Lys Lys Leu Trp Ser 235
 245 Ser Glu Asp Phe Ser Thr Leu Asn Ser Asp Met Gly Ala Gly Cys Trp 250
 260 Gly Arg Ile Leu Asn Gln Asn Tyr Ile Asn Gly Tyr Met Thr Ser Thr 265
 275 Ile Ala Trp Asn Leu Val Ala Ser Tyr Tyr Glu Gln Leu Pro Tyr Gly 280
 290 Arg Cys Gly Leu Met Thr Ala Gln Glu Pro Trp Ser Gly His Tyr Val 295
 305 Val Glu Ser Pro Val Trp Val Ser Ala His Thr Thr Gln Phe Thr Gln 310
 325 Pro Gly Trp Tyr Tyr Leu Lys Thr Val Gly His Leu Glu Lys Gly Gly 330
 340 Ser Tyr Val Ala Leu Thr Asp Gly Leu Gly Asn Leu Thr Ile Ile Ile 345
 355 Glu Thr Met Ser His Lys His Ser Lys Cys Ile Arg Pro Phe Leu Pro 360
 370 Tyr Phe Asn Val Ser Gln Gln Phe Ala Thr Phe Val Leu Lys Gly Ser 375
 385 Phe Ser Glu Ile Pro Glu Leu Gln Val Trp Tyr Thr Lys Leu Gly Lys 380
 405 Thr Ser Glu Arg Phe Leu Phe Lys Gln Leu Asp Ser Leu Trp Leu Leu 395
 420 Asp Ser Asp Gly Ser Phe Thr Leu Ser Leu His Glu Asp Glu Leu Phe 410
 435 Thr Leu Thr Thr Leu Thr Thr Gly Arg Lys Gly Ser Tyr Pro Leu Pro 425
 450 Pro Lys Ser Gln Pro Phe Pro Ser Thr Tyr Lys Asp Asp Phe Asn Val 440
 465 Asp Tyr Pro Phe Phe Ser Glu Ala Pro Asn Phe Ala Asp Gln Thr Gly 445
 485 Val Phe Glu Tyr Phe Thr Asn Ile Glu Asp Pro Gly Glu His His Phe 460
 500 Thr Leu Arg Gln Val Leu Asn Gln Arg Pro Ile Thr Trp Ala Ala Asp 475
 515 Ala Ser Asn Thr Ile Ser Ile Ile Gly Asp Tyr Asn Trp Thr Asn Leu 480
 530 Thr Ile Lys Cys Asp Val Tyr Ile Glu Thr Pro Asp Thr Gly Gly Val 490
 545 Phe Ile Ala Gly Arg Val Asn Lys Gly Gly Ile Leu Ile Arg Ser Ala 505
 565 Arg Gly Ile Phe Phe Trp Ile Phe Ala Asn Gly Ser Tyr Arg Val Thr 510
 580 Gly Asp Leu Ala Gly Trp Ile Ile Tyr Ala Leu Gly Arg Val Glu Val 525
 595 Thr Ala Lys Lys Trp Tyr Thr Leu Thr Leu Thr Ile Lys Gly His Phe 540
 610 Ala Ser Gly Met Leu Asn Asp Lys Ser Leu Trp Thr Asp Ile Pro Val 555
 625 Asn Phe Pro Lys Asn Gly Trp Ala Ala Ile Gly Thr His Ser Phe Glu 570
 645 Phe Ala Gln Phe Asp Asn Phe Leu Val Glu Ala Thr Arg 585
 660 665

<210> 210
 <211> 508
 <212> PRT

<213> Homo sapiens

<400> 210

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Met Gln Arg Leu Leu Thr Pro Val Lys Arg Ile Leu Gln Leu Thr Arg
1      5      10      15
Ala Val Gln Glu Thr Ser Leu Thr Pro Ala Arg Leu Leu Pro Val Ala
20      25      30
His Gln Arg Phe Ser Thr Ala Ser Ala Val Pro Leu Ala Lys Thr Asp
35      40      45
Thr Trp Pro Lys Asp Val Gly Ile Leu Ala Leu Glu Val Tyr Phe Pro
50      55      60
Ala Gln Tyr Val Asp Gln Thr Asp Leu Glu Lys Tyr Asn Asn Val Glu
65      70      75      80
Ala Gly Lys Tyr Thr Val Gly Leu Gly Gln Thr Arg Met Gly Phe Cys
85      90      95
Ser Val Gln Glu Asp Ile Asn Ser Leu Cys Leu Thr Val Val Gln Arg
100     105     110
Leu Met Glu Arg Ile Gln Leu Pro Trp Asp Ser Val Gly Arg Leu Glu
115     120     125
Val Gly Thr Glu Thr Ile Ile Asp Lys Ser Lys Ala Val Lys Thr Val
130     135     140
Leu Met Glu Leu Phe Gln Asp Ser Gly Asn Thr Asp Ile Glu Gly Ile
145     150     155     160
Asp Thr Thr Asn Ala Cys Tyr Gly Gly Thr Ala Ser Leu Phe Asn Ala
165     170     175
Ala Asn Trp Met Glu Ser Ser Ser Trp Asp Gly Arg Tyr Ala Met Val
180     185     190
Val Cys Gly Asp Ile Ala Val Tyr Pro Ser Gly Asn Ala Arg Pro Thr
195     200     205
Gly Gly Ala Gly Ala Val Ala Met Leu Ile Gly Pro Lys Ala Pro Leu
210     215     220
Ala Leu Glu Arg Gly Leu Arg Gly Thr His Met Glu Asn Val Tyr Asp
225     230     235     240
Phe Tyr Lys Pro Asn Leu Ala Ser Glu Tyr Pro Ile Val Asp Gly Lys
245     250     255
Leu Ser Ile Gln Cys Tyr Leu Arg Ala Leu Asp Arg Cys Tyr Thr Ser
260     265     270
Tyr Arg Lys Lys Ile Gln Asn Gln Trp Lys Gln Ala Gly Ser Asp Arg
275     280     285
Pro Phe Thr Leu Asp Asp Leu Gln Tyr Met Ile Phe His Thr Pro Phe
290     295     300
Cys Lys Met Val Gln Lys Ser Leu Ala Arg Leu Met Phe Asn Asp Phe
305     310     315     320
Leu Ser Ala Ser Ser Asp Thr Gln Thr Ser Leu Tyr Lys Gly Leu Glu
325     330     335
Ala Phe Gly Gly Leu Lys Leu Glu Asp Thr Tyr Thr Asn Lys Asp Leu
340     345     350
Asp Lys Ala Leu Leu Lys Ala Ser Gln Asp Met Phe Asp Lys Lys Thr
355     360     365
Lys Ala Ser Leu Tyr Leu Ser Thr His Asn Gly Asn Met Tyr Thr Ser
370     375     380
Ser Leu Tyr Gly Cys Leu Ala Ser Leu Leu Ser His His Ser Ala Gln
385     390     395     400
Glu Leu Ala Gly Ser Arg Ile Gly Ala Phe Ser Tyr Gly Ser Gly Leu
405     410     415
Ala Ala Ser Phe Phe Ser Phe Arg Val Ser Gln Asp Ala Ala Pro Gly
420     425     430
Ser Pro Leu Asp Lys Leu Val Ser Ser Thr Ser Asp Leu Pro Lys Arg
435     440     445
Leu Ala Ser Arg Lys Cys Val Ser Pro Glu Glu Phe Thr Glu Ile Met
450     455     460
Asn Gln Arg Glu Gln Phe Tyr His Lys Val Asn Phe Ser Pro Pro Gly
465     470     475     480
Asp Thr Asn Ser Leu Phe Pro Gly Thr Trp Tyr Leu Glu Arg Val Asp
485     490     495
Glu Gln His Arg Arg Lys Tyr Ala Arg Arg Pro Val
500     505

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<210> 211

<211> 548

<212> PRT
 <213> Homo sapiens
 <400> 211
 Met Asn Ile Glu Val Val Glu Val Leu Thr Leu Asn Gln Glu Val Ala
 1 5 10 15
 Gly Pro Arg Asn Ala Gln Ile Gln Ala Leu Tyr Ala Glu Asp Gly Ser
 20 25 30
 Leu Ser Ala Asp Ala Pro Ser Glu Gln Val Gln Gln Gln Gly Lys His
 35 40 45
 Pro Gly Asp Pro Glu Ala Ala Arg Gln Arg Phe Arg Gln Phe Arg Tyr
 50 55 60
 Lys Asp Met Thr Gly Pro Arg Glu Ala Leu Asp Gln Leu Arg Glu Leu
 65 70 75 80
 Cys His Gln Trp Leu Gln Pro Lys Ala Arg Ser Lys Glu Gln Ile Leu
 85 90 95
 Glu Leu Leu Val Leu Glu Gln Phe Leu Gly Ala Leu Pro Val Lys Leu
 100 105 110
 Arg Thr Trp Val Glu Ser Gln His Pro Glu Asn Cys Gln Glu Val Val
 115 120 125
 Ala Leu Val Glu Gly Val Thr Trp Met Ser Glu Glu Glu Val Leu Pro
 130 135 140
 Ala Gly Gln Pro Ala Glu Gly Thr Thr Cys Cys Leu Glu Val Thr Ala
 145 150 155 160
 Gln Gln Glu Glu Lys Gln Glu Asp Ala Ala Ile Cys Pro Val Thr Val
 165 170 175
 Leu Pro Glu Glu Pro Val Thr Phe Gln Asp Val Ala Val Asp Phe Ser
 180 185 190
 Arg Glu Glu Trp Gly Leu Leu Gly Pro Thr Gln Arg Thr Glu Tyr Arg
 195 200 205
 Asp Val Met Leu Glu Thr Phe Gly His Leu Val Ser Val Gly Trp Glu
 210 215 220
 Thr Thr Leu Glu Asn Lys Glu Leu Ala Pro Asn Ser Asp Ile Pro Glu
 225 230 235 240
 Glu Glu Pro Ala Pro Ser Leu Lys Val Gln Glu Ser Ser Arg Asp Cys
 245 250 255
 Ala Leu Ser Ser Thr Leu Glu Asp Thr Leu Gln Gly Gly Val Gln Glu
 260 265 270
 Val Gln Asp Thr Val Leu Lys Gln Met Glu Ser Ala Gln Glu Lys Asp
 275 280 285
 Leu Pro Gln Lys Lys His Phe Asp Asn Arg Glu Ser Gln Ala Asn Ser
 290 295 300
 Gly Ala Leu Asp Thr Asn Gln Val Ser Leu Gln Lys Ile Asp Asn Pro
 305 310 315 320
 Glu Ser Gln Ala Asn Ser Gly Ala Leu Asp Thr Asn Gln Val Leu Leu
 325 330 335
 His Lys Ile Pro Pro Arg Lys Arg Leu Arg Lys Arg Asp Ser Gln Val
 340 345 350
 Lys Ser Met Lys His Asn Ser Arg Val Lys Ile His Gln Lys Ser Cys
 355 360 365
 Glu Arg Gln Lys Ala Lys Glu Gly Asn Gly Cys Arg Lys Thr Phe Ser
 370 375 380
 Arg Ser Thr Lys Gln Ile Thr Phe Ile Arg Ile His Lys Gly Ser Gln
 385 390 395 400
 Val Cys Arg Cys Ser Glu Cys Gly Lys Ile Phe Arg Asn Pro Arg Tyr
 405 410 415
 Phe Ser Val His Lys Lys Ile His Thr Gly Glu Arg Pro Tyr Val Cys
 420 425 430
 Gln Asp Cys Gly Lys Gly Phe Val Gln Ser Ser Ser Leu Thr Gln His
 435 440 445
 Gln Arg Val His Ser Gly Glu Arg Pro Phe Glu Cys Gln Glu Cys Gly
 450 455 460
 Arg Thr Phe Asn Asp Arg Ser Ala Ile Ser Gln His Leu Arg Thr His
 465 470 475 480
 Thr Gly Ala Lys Pro Tyr Lys Cys Gln Asp Cys Gly Lys Ala Phe Arg
 485 490 495
 Gln Ser Ser His Leu Ile Arg His Gln Arg Thr His Thr Gly Glu Arg
 500 505 510
 Pro Tyr Ala Cys Asn Lys Cys Gly Lys Ala Phe Thr Gln Ser Ser His
 515 520 525

Leu Ile Gly His Gln Arg Thr His Asn Arg Thr Lys Arg Lys Lys Lys
 530 535 540
 Gln Pro Thr Ser
 545

<210> 212
 <211> 84
 <212> PRT
 <213> Homo sapiens
 <400> 212

Met Ala Thr Met Glu Asn Lys Val Ile Cys Ala Leu Val Leu Val Ser
 1 5 10 15
 Met Leu Ala Leu Gly Thr Leu Ala Glu Ala Gln Thr Glu Thr Cys Thr
 20 25 30
 Val Ala Pro Arg Glu Arg Gln Asn Cys Gly Phe Pro Gly Val Thr Pro
 35 40 45
 Ser Gln Cys Ala Asn Lys Gly Cys Cys Phe Asp Asp Thr Val Arg Gly
 50 55 60
 Val Pro Trp Cys Phe Tyr Pro Asn Thr Ile Asp Val Pro Pro Glu Glu
 65 70 75 80
 Glu Cys Glu Phe

<210> 213
 <211> 339
 <212> PRT
 <213> Homo sapiens
 <400> 213

Met Ala Met Gln Met Gln Leu Glu Ala Asn Ala Asp Thr Ser Val Glu
 1 5 10 15
 Glu Glu Ser Phe Gly Pro Gln Pro Ile Ser Arg Leu Glu Gln Cys Gly
 20 25 30
 Ile Asn Ala Asn Asp Val Lys Lys Leu Glu Glu Ala Gly Phe His Thr
 35 40 45
 Val Glu Ala Val Ala Tyr Ala Pro Lys Lys Glu Leu Ile Asn Ile Lys
 50 55 60
 Gly Ile Ser Glu Ala Lys Ala Asp Lys Ile Leu Ala Glu Ala Ala Lys
 65 70 75 80
 Leu Val Pro Met Gly Phe Thr Thr Ala Thr Glu Phe His Gln Arg Arg
 85 90 95
 Ser Glu Ile Ile Gln Ile Thr Thr Gly Ser Lys Glu Leu Asp Lys Leu
 100 105 110
 Leu Gln Gly Gly Ile Glu Thr Gly Ser Ile Thr Glu Met Phe Gly Glu
 115 120 125
 Phe Arg Thr Gly Lys Thr Gln Ile Cys His Thr Leu Ala Val Thr Cys
 130 135 140
 Gln Leu Pro Ile Asp Arg Gly Gly Gly Glu Gly Lys Ala Met Tyr Ile
 145 150 155 160
 Asp Thr Glu Gly Thr Phe Arg Pro Glu Arg Leu Leu Ala Val Ala Glu
 165 170 175
 Arg Tyr Gly Leu Ser Gly Ser Asp Val Leu Asp Asn Val Ala Tyr Ala
 180 185 190
 Arg Ala Phe Asn Thr Asp His Gln Thr Gln Leu Leu Tyr Gln Ala Ser
 195 200 205
 Ala Met Met Val Glu Ser Arg Tyr Ala Leu Leu Ile Val Asp Ser Ala
 210 215 220
 Thr Ala Leu Tyr Arg Thr Asp Tyr Ser Gly Arg Gly Glu Leu Ser Ala
 225 230 235 240
 Arg Gln Met His Leu Ala Arg Phe Leu Arg Met Leu Leu Arg Leu Ala
 245 250 255
 Asp Glu Phe Gly Val Ala Val Val Ile Thr Asn Gln Val Val Ala Gln
 260 265 270
 Val Asp Gly Ala Ala Met Phe Ala Ala Asp Pro Lys Lys Pro Ile Gly
 275 280 285
 Gly Asn Ile Ile Ala His Ala Ser Thr Thr Arg Leu Tyr Leu Arg Lys
 290 295 300
 Gly Arg Gly Glu Thr Arg Ile Cys Lys Ile Tyr Asp Ser Pro Cys Leu
 305 310 315 320
 Pro Glu Ala Glu Ala Met Phe Ala Ile Asn Ala Asp Gly Val Gly Asp

Ala Lys Asp 325 330 335
 <210> 214
 <211> 561
 <212> PRT
 <213> Homo sapiens
 <400> 214
 Met Cys Gly Ile Trp Ala Leu Phe Gly Ser Asp Asp Cys Leu Ser Val
 1 5 10 15
 Gln Cys Leu Ser Ala Met Lys Ile Ala His Arg Gly Pro Asp Ala Phe
 20 25 30
 Arg Phe Glu Asn Val Asn Gly Tyr Thr Asn Cys Cys Phe Gly Phe His
 35 40 45
 Arg Leu Ala Val Val Asp Pro Leu Phe Gly Met Gln Pro Ile Arg Val
 50 55 60
 Lys Lys Tyr Pro Tyr Leu Trp Leu Cys Tyr Asn Gly Glu Ile Tyr Asn
 65 70 75 80
 His Lys Lys Met Gln Gln His Phe Glu Phe Glu Tyr Gln Thr Lys Val
 85 90 95
 Asp Gly Glu Ile Ile Leu His Leu Tyr Asp Lys Gly Gly Ile Glu Gln
 100 105 110
 Thr Ile Cys Met Leu Asp Gly Val Phe Ala Phe Val Leu Leu Asp Thr
 115 120 125
 Ala Asn Lys Lys Val Phe Leu Gly Arg Asp Thr Tyr Gly Val Arg Pro
 130 135 140
 Leu Phe Lys Ala Met Thr Glu Asp Gly Phe Leu Ala Val Cys Ser Glu
 145 150 155 160
 Ala Lys Gly Leu Val Thr Leu Lys His Ser Ala Thr Pro Phe Leu Lys
 165 170 175
 Val Glu Pro Phe Leu Pro Gly His Tyr Glu Val Leu Asp Leu Lys Pro
 180 185 190
 Asn Gly Lys Val Ala Ser Val Glu Met Val Lys Tyr His His Cys Arg
 195 200 205
 Asp Glu Pro Leu His Ala Leu Tyr Asp Asn Val Glu Lys Leu Phe Pro
 210 215 220
 Gly Phe Glu Ile Glu Thr Val Lys Asn Asn Leu Arg Ile Leu Phe Asn
 225 230 235 240
 Asn Ala Val Lys Lys Arg Leu Met Thr Asp Arg Arg Ile Gly Cys Leu
 245 250 255
 Leu Ser Gly Gly Leu Asp Ser Ser Leu Val Ala Ala Thr Leu Leu Lys
 260 265 270
 Gln Leu Lys Glu Ala Gln Val Gln Tyr Pro Leu Gln Thr Phe Ala Ile
 275 280 285
 Gly Met Glu Asp Ser Pro Asp Leu Leu Ala Ala Arg Lys Val Ala Asp
 290 295 300
 His Ile Gly Ser Glu His Tyr Glu Val Leu Phe Asn Ser Glu Glu Gly
 305 310 315 320
 Ile Gln Ala Leu Asp Glu Val Ile Phe Ser Leu Glu Thr Tyr Asp Ile
 325 330 335
 Thr Thr Val Arg Ala Ser Val Gly Met Tyr Leu Ile Ser Lys Tyr Ile
 340 345 350
 Arg Lys Asn Thr Asp Ser Val Val Ile Phe Ser Gly Glu Gly Ser Asp
 355 360 365
 Glu Leu Thr Gln Gly Tyr Ile Tyr Phe His Lys Ala Pro Ser Pro Glu
 370 375 380
 Lys Ala Glu Glu Glu Ser Glu Arg Leu Leu Arg Glu Leu Tyr Leu Phe
 385 390 395 400
 Asp Val Leu Arg Ala Asp Arg Thr Thr Ala Ala His Gly Leu Glu Leu
 405 410 415
 Arg Val Pro Phe Leu Asp His Arg Phe Ser Ser Tyr Tyr Leu Ser Leu
 420 425 430
 Pro Pro Glu Met Arg Ile Pro Lys Asn Gly Ile Glu Lys His Leu Leu
 435 440 445
 Arg Glu Thr Phe Glu Asp Ser Asn Leu Ile Pro Lys Glu Ile Leu Trp
 450 455 460
 Arg Pro Lys Glu Ala Phe Ser Asp Gly Ile Thr Ser Val Lys Asn Ser
 465 470 475 480

Trp Phe Lys Ile Leu Gln Glu Tyr Val Glu His Gln Val Asp Asp Ala
 485 490 495
 Met Met Ala Asn Ala Ala Gln Lys Phe Pro Phe Asn Thr Pro Lys Thr
 500 505 510
 Lys Glu Gly Tyr Tyr Tyr Arg Gln Val Phe Glu Arg His Tyr Pro Gly
 515 520 525
 Arg Ala Asp Trp Leu Ser His Tyr Trp Met Pro Lys Trp Ile Asn Ala
 530 535 540
 Thr Asp Pro Ser Ala Arg Thr Leu Thr His Tyr Lys Ser Ala Val Lys
 545 550 555 560
 Ala

<210> 215
 <211> 227
 <212> PRT
 <213> Homo sapiens
 <400> 215

Met Ala Trp Lys Ser Gly Gly Ala Ser His Ser Glu Leu Ile His Asn
 1 5 10 15
 Leu Arg Lys Asn Gly Ile Ile Lys Thr Asp Lys Val Phe Glu Val Met
 20 25 30
 Leu Ala Thr Asp Arg Ser His Tyr Ala Lys Cys Asn Pro Tyr Met Asp
 35 40 45
 Ser Pro Gln Ser Ile Gly Phe Gln Ala Thr Ile Ser Ala Pro His Met
 50 55 60
 His Ala Tyr Ala Leu Glu Leu Leu Phe Asp Gln Leu His Glu Gly Ala
 65 70 75 80
 Lys Ala Leu Asp Val Gly Ser Gly Ser Gly Ile Leu Thr Ala Cys Phe
 85 90 95
 Ala Arg Met Val Gly Cys Thr Gly Lys Val Ile Gly Ile Asp His Ile
 100 105 110
 Lys Glu Leu Val Asp Asp Ser Val Asn Asn Val Arg Lys Asp Asp Pro
 115 120 125
 Thr Leu Leu Ser Ser Gly Arg Val Gln Leu Val Val Gly Asp Gly Arg
 130 135 140
 Met Gly Tyr Ala Glu Glu Ala Pro Tyr Asp Ala Ile His Val Gly Ala
 145 150 155 160
 Ala Ala Pro Val Val Pro Gln Ala Leu Ile Asp Gln Leu Lys Pro Gly
 165 170 175
 Gly Arg Leu Ile Leu Pro Val Gly Pro Ala Gly Gly Asn Gln Met Leu
 180 185 190
 Glu Gln Tyr Asp Lys Leu Gln Asp Gly Ser Ile Lys Met Lys Pro Leu
 195 200 205
 Met Gly Val Ile Tyr Val Pro Leu Thr Asp Lys Glu Lys Gln Trp Ser
 210 215 220
 Arg Trp Lys
 225

<210> 216
 <211> 595
 <212> PRT
 <213> Homo sapiens
 <400> 216

Met Thr Met Thr Leu His Thr Lys Ala Ser Gly Met Ala Leu Leu His
 1 5 10 15
 Gln Ile Gln Gly Asn Glu Leu Glu Pro Leu Asn Arg Pro Gln Leu Lys
 20 25 30
 Ile Pro Leu Glu Arg Pro Leu Gly Glu Val Tyr Leu Asp Ser Ser Lys
 35 40 45
 Pro Ala Val Tyr Asn Tyr Pro Glu Gly Ala Ala Tyr Glu Phe Asn Ala
 50 55 60
 Ala Ala Ala Ala Asn Ala Gln Val Tyr Gly Gln Thr Gly Leu Pro Tyr
 65 70 75 80
 Gly Pro Gly Ser Glu Ala Ala Ala Phe Gly Ser Asn Gly Leu Gly Gly
 85 90 95
 Phe Pro Pro Leu Asn Ser Val Ser Pro Ser Pro Leu Met Leu Leu His
 100 105 110
 Pro Pro Pro Gln Leu Ser Pro Phe Leu Gln Pro His Gly Gln Gln Val

Pro	Tyr	Tyr	Leu	Glu	Asn	Glu	Pro	Ser	Gly	Tyr	Thr	Val	Arg	Glu	Ala
115	130					135					140				
Gly	Pro	Pro	Ala	Phe	Tyr	Arg	Pro	Asn	Ser	Asp	Asn	Arg	Arg	Gln	Gly
145					150					155					160
Gly	Arg	Glu	Arg	Leu	Ala	Ser	Thr	Asn	Asp	Lys	Gly	Ser	Met	Ala	Met
				165					170						175
Glu	Ser	Ala	Lys	Glu	Thr	Arg	Tyr	Cys	Ala	Val	Cys	Asn	Asp	Tyr	Ala
			180					185					190		
Ser	Gly	Tyr	His	Tyr	Gly	Val	Trp	Ser	Cys	Glu	Gly	Cys	Lys	Ala	Phe
		195					200					205			
Phe	Lys	Arg	Ser	Ile	Gln	Gly	His	Asn	Asp	Tyr	Met	Cys	Pro	Ala	Thr
	210				215						220				
Asn	Gln	Cys	Thr	Ile	Asp	Lys	Asn	Arg	Arg	Lys	Ser	Cys	Gln	Ala	Cys
225					230					235					240
Arg	Leu	Arg	Lys	Cys	Tyr	Glu	Val	Gly	Met	Met	Lys	Gly	Gly	Ile	Arg
				245					250					255	
Lys	Asp	Arg	Arg	Gly	Gly	Arg	Met	Leu	Lys	His	Lys	Arg	Gln	Arg	Asp
			260					265					270		
Asp	Gly	Glu	Gly	Arg	Gly	Glu	Val	Gly	Ser	Ala	Gly	Asp	Met	Arg	Ala
		275					280					285			
Ala	Asn	Leu	Trp	Pro	Ser	Pro	Leu	Met	Ile	Lys	Arg	Ser	Lys	Lys	Asn
	290					295					300				
Ser	Leu	Ala	Leu	Ser	Leu	Thr	Ala	Asp	Gln	Met	Val	Ser	Ala	Leu	Leu
305					310					315					320
Asp	Ala	Glu	Pro	Pro	Ile	Leu	Tyr	Ser	Glu	Tyr	Asp	Pro	Thr	Arg	Pro
				325					330					335	
Phe	Ser	Glu	Ala	Ser	Met	Met	Gly	Leu	Leu	Thr	Asn	Leu	Ala	Asp	Arg
			340				345						350		
Glu	Leu	Val	His	Met	Ile	Asn	Trp	Ala	Lys	Arg	Val	Pro	Gly	Phe	Val
		355					360					365			
Asp	Leu	Thr	Leu	His	Asp	Gln	Val	His	Leu	Leu	Glu	Cys	Ala	Trp	Leu
	370					375					380				
Glu	Ile	Leu	Met	Ile	Gly	Leu	Val	Trp	Arg	Ser	Met	Glu	His	Pro	Val
385					390					395					400
Lys	Leu	Leu	Phe	Ala	Pro	Asn	Leu	Leu	Leu	Asp	Arg	Asn	Gln	Gly	Lys
				405					410					415	
Cys	Val	Glu	Gly	Met	Val	Glu	Ile	Phe	Asp	Met	Leu	Leu	Ala	Thr	Ser
			420					425					430		
Ser	Arg	Phe	Arg	Met	Met	Asn	Leu	Gln	Gly	Glu	Glu	Phe	Val	Cys	Leu
		435					440					445			
Lys	Ser	Ile	Ile	Leu	Leu	Asn	Ser	Gly	Val	Tyr	Thr	Phe	Leu	Ser	Ser
	450					455					460				
Thr	Leu	Lys	Ser	Leu	Glu	Lys	Asp	His	Ile	His	Arg	Val	Leu	Asp	
465					470					475				480	
Lys	Ile	Thr	Asp	Thr	Leu	Ile	His	Leu	Met	Ala	Lys	Ala	Gly	Leu	Thr
				485					490					495	
Leu	Gln	Gln	Gln	His	Gln	Arg	Leu	Ala	Gln	Leu	Leu	Leu	Ile	Leu	Ser
			500					505					510		
His	Ile	Arg	His	Met	Ser	Asn	Lys	Gly	Met	Glu	His	Leu	Tyr	Ser	Met
		515					520					525			
Lys	Cys	Lys	Asn	Val	Val	Pro	Leu	Tyr	Asp	Leu	Leu	Leu	Glu	Met	Leu
	530					535					540				
Asp	Ala	His	Arg	Leu	His	Ala	Pro	Thr	Ser	Arg	Gly	Gly	Ala	Ser	Val
545					550					555					560
Glu	Glu	Thr	Asp	Gln	Ser	His	Leu	Ala	Thr	Ala	Gly	Ser	Thr	Ser	Ser
				565					570					575	
His	Ser	Leu	Gln	Lys	Tyr	Tyr	Ile	Thr	Gly	Glu	Ala	Glu	Gly	Phe	Pro
			580					585					590		
Ala	Thr	Val													
		595													

<210> 217

<211> 427

<212> PRT

<213> Homo sapiens

<400> 217

Met	Ala	Val	Leu	Ala	Ala	Leu	Leu	Arg	Ser	Gly	Ala	Arg	Ser	Arg	Ser
1				5					10				15		

Pro Leu Leu Arg Arg Leu Val Gln Glu Ile Arg Tyr Val Glu Arg Ser
 20 25 30
 Tyr Val Ser Lys Pro Thr Leu Lys Glu Val Val Ile Val Ser Ala Thr
 35 40 45
 Arg Thr Pro Ile Gly Ser Phe Leu Gly Ser Leu Ser Leu Leu Pro Ala
 50 55 60
 Thr Lys Leu Gly Ser Ile Ala Ile Gln Gly Ala Ile Glu Lys Ala Gly
 65 70 75 80
 Ile Pro Lys Glu Glu Val Lys Glu Ala Tyr Met Gly Asn Val Leu Gln
 85 90 95
 Gly Gly Glu Gly Gln Ala Pro Thr Arg Gln Ala Val Leu Gly Ala Gly
 100 105 110
 Leu Pro Ile Ser Thr Pro Cys Thr Thr Ile Asn Lys Val Cys Ala Ser
 115 120 125
 Gly Met Lys Ala Ile Met Met Ala Ser Gln Ser Leu Met Cys Gly His
 130 135 140
 Gln Asp Val Met Val Ala Gly Gly Met Glu Ser Met Ser Asn Val Pro
 145 150 155 160
 Tyr Val Met Asn Arg Gly Ser Thr Pro Tyr Gly Gly Val Lys Leu Glu
 165 170 175
 Asp Leu Ile Val Lys Asp Gly Leu Thr Asp Val Tyr Asn Lys Ile His
 180 185 190
 Met Gly Ser Cys Ala Glu Asn Thr Ala Lys Lys Leu Asn Ile Ala Arg
 195 200 205
 Asn Glu Gln Asp Ala Tyr Ala Ile Asn Ser Tyr Thr Arg Ser Lys Ala
 210 215 220
 Ala Trp Glu Ala Gly Lys Phe Gly Asn Glu Val Ile Pro Val Thr Val
 225 230 235 240
 Thr Val Lys Gly Gln Pro Asp Val Val Val Lys Glu Asp Glu Glu Tyr
 245 250 255
 Lys Arg Val Asp Phe Ser Lys Val Pro Lys Leu Lys Thr Val Phe Gln
 260 265 270
 Lys Glu Asn Gly Thr Val Thr Ala Ala Asn Ala Ser Thr Leu Asn Asp
 275 280 285
 Gly Ala Ala Ala Leu Val Leu Met Thr Ala Asp Ala Ala Lys Arg Leu
 290 295 300
 Asn Val Thr Pro Leu Ala Arg Ile Val Ala Phe Ala Asp Ala Ala Val
 305 310 315 320
 Glu Pro Ile Asp Phe Pro Ile Ala Pro Val Tyr Ala Ala Ser Met Val
 325 330 335
 Leu Lys Asp Val Gly Leu Lys Lys Glu Asp Ile Ala Met Trp Glu Val
 340 345 350
 Asn Glu Ala Phe Ser Leu Val Val Leu Ala Asn Ile Lys Met Leu Glu
 355 360 365
 Ile Asp Pro Gln Lys Val Asn Ile Asn Gly Gly Ala Val Ser Leu Gly
 370 375 380
 His Pro Ile Gly Met Ser Gly Ala Arg Ile Val Gly His Leu Thr His
 385 390 395 400
 Ala Leu Lys Gln Gly Glu Tyr Gly Leu Ala Ser Ile Cys Asn Gly Gly
 405 410 415
 Gly Gly Ala Ser Ala Met Leu Ile Gln Lys Leu
 420 425

<210> 218

<211> 273

<212> PRT

<213> Homo sapiens

<400> 218

Met Ala Ala Ala Asp Gly Ala Leu Pro Glu Ala Ala Ala Leu Glu Gln
 1 5 10 15
 Pro Ala Glu Leu Pro Ala Ser Val Arg Ala Ser Ile Glu Arg Lys Arg
 20 25 30
 Gln Arg Ala Leu Met Leu Arg Gln Ala Arg Leu Ala Ala Arg Pro Tyr
 35 40 45
 Ser Ala Thr Ala Ala Ala Ala Thr Gly Gly Met Ala Asn Val Lys Ala
 50 55 60
 Ala Pro Lys Ile Ile Asp Thr Gly Gly Gly Phe Ile Leu Glu Glu Glu
 65 70 75 80
 Glu Glu Glu Glu Gln Lys Ile Gly Lys Val Val His Gln Pro Gly Pro

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<210> 219
<211> 1227
<212> PRT
<213> Homo sapiens
<400> 219
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Met 1	Asp	Ser	Phe	Asp 5	Leu	Ala	Leu	Leu	Gln 10	Glu	Trp	Asp	Leu	Glu 15	Ser
Leu	Cys	Val	Tyr 20	Glu	Pro	Asp	Arg	Asn 25	Ala	Leu	Arg	Arg	Lys 30	Glu	Arg
Glu	Arg	Arg 35	Asn	Gln	Glu	Thr	Gln 40	Gln	Asp	Asp	Gly	Thr 45	Phe	Asn	Ser
Ser	Tyr 50	Ser	Leu	Phe	Ser	Glu 55	Pro	Tyr	Lys	Thr 60	Asn	Lys	Gly	Asp	Glu
Leu	Ser	Asn	Arg	Ile	Gln 70	Asn	Thr	Leu	Gly	Asn 75	Tyr	Asp	Glu	Met	Lys
Asp	Phe	Leu	Thr	Asp 85	Arg	Thr	Asn	Gln	Ser 90	His	Leu	Val	Gly	Val 95	Pro
Lys	Pro	Gly	Val 100	Pro	Gln	Thr	Pro	Val 105	Asn	Lys	Ile	Asp	Glu 110	His	Phe
Val	Ala	Asp 115	Ser	Arg	Ala	Gln	Asn 120	Gln	Pro	Ser	Ser	Ile 125	Cys	Ser	Thr
Thr	Thr 130	Ser	Thr	Pro	Ala	Ala 135	Val	Pro	Val	Gln	Gln	Ser 140	Lys	Arg	Gly
Thr	Met	Gly	Trp	Gln 150	Lys	Ala	Gly	His	Pro	Pro	Ser	Asp	Gly	Gln	Gln
Arg	Ala	Thr	Gln	Gln 165	Gly	Ser	Leu	Arg	Thr 170	Leu	Leu	Gly	Asp	Gly	Val
Gly	Arg	Gln	Gln 180	Pro	Arg	Ala	Lys	Gln 185	Val	Cys	Asn	Val	Glu 190	Val	Gly
Leu	Gln	Thr 195	Gln	Glu	Arg	Pro	Pro 200	Ala	Met	Ala	Ala	Lys 205	His	Ser	Ser
Ser	Gly 210	His	Cys	Val	Gln	Asn 215	Phe	Pro	Pro	Ser	Leu	Ala	Ser	Lys	Pro
Ser	Leu	Val	Gln	Gln 230	Lys	Pro	Thr	Ala	Tyr 235	Val	Arg	Pro	Met	Asp	Gly
Gln	Asp	Gln	Ala 245	Pro	Asp	Glu	Ser	Pro	Lys 250	Leu	Lys	Ser	Ser	Ser	Glu
Thr	Ser	Val	His 260	Cys	Thr	Ser	Tyr	Arg 265	Gly	Val	Pro	Ala	Ser 270	Lys	Pro
Glu	Pro	Ala 275	Arg	Ala	Lys	Ala	Lys 280	Leu	Ser	Lys	Phe	Ser 285	Ile	Pro	Lys
Gln	Gly 290	Glu	Glu	Ser	Arg	Ser 295	Gly	Glu	Thr	Asn 300	Ser	Cys	Val	Glu	Glu

Ile Ile Arg Glu Met Thr Trp Leu Pro Pro Leu Ser Ala Ile Gln Ala
 305 310 315 320
 Pro Gly Lys Val Glu Pro Thr Lys Phe Pro Phe Pro Asn Lys Asp Ser
 325 330 335
 Gln Leu Val Ser Ser Gly His Asn Asn Pro Lys Lys Gly Asp Ala Glu
 340 345 350
 Pro Glu Ser Pro Asp Asn Gly Thr Ser Asn Thr Ser Met Leu Glu Asp
 355 360 365
 Asp Leu Lys Leu Ser Ser Asp Glu Glu Glu Asn Glu Gln Gln Ala Ala
 370 375 380
 Gln Arg Thr Ala Leu Arg Ala Leu Ser Asp Ser Ala Val Val Gln Gln
 385 390 395 400
 Pro Asn Cys Arg Thr Ser Val Pro Ser Ser Lys Gly Ser Ser Ser Ser
 405 410 415
 Ser Ser Ser Gly Thr Ser Ser Ser Ser Ser Asp Ser Glu Ser Ser Ser
 420 425 430
 Gly Ser Asp Ser Glu Thr Glu Ser Ser Ser Ser Glu Ser Glu Gly Ser
 435 440 445
 Lys Pro Pro His Phe Ser Ser Pro Glu Ala Glu Pro Ala Ser Ser Asn
 450 455 460
 Lys Trp Gln Leu Asp Lys Trp Leu Asn Lys Val Asn Pro His Lys Pro
 465 470 475 480
 Pro Ile Leu Ile Gln Asn Glu Ser His Gly Ser Glu Ser Asn Gln Tyr
 485 490 495
 Tyr Asn Pro Val Lys Glu Asp Val Gln Asp Cys Gly Lys Val Pro Asp
 500 505 510
 Val Cys Gln Pro Ser Leu Arg Glu Lys Glu Ile Lys Ser Thr Cys Lys
 515 520 525
 Glu Glu Gln Arg Pro Arg Thr Ala Asn Lys Ala Pro Gly Ser Lys Gly
 530 535 540
 Val Lys Gln Lys Ser Pro Pro Ala Ala Val Ala Val Ala Val Ser Ala
 545 550 555 560
 Ala Ala Pro Pro Pro Ala Val Pro Cys Ala Pro Ala Glu Asn Ala Pro
 565 570 575
 Ala Pro Ala Arg Arg Ser Ala Gly Lys Lys Pro Thr Arg Arg Thr Glu
 580 585 590
 Arg Thr Ser Ala Gly Asp Gly Ala Asn Cys His Arg Pro Glu Glu Pro
 595 600 605
 Ala Ala Ala Asp Ala Leu Gly Thr Ser Val Val Val Pro Pro Glu Pro
 610 615 620
 Thr Lys Thr Arg Pro Cys Gly Asn Asn Arg Ala Ser His Arg Lys Glu
 625 630 635 640
 Leu Arg Ser Ser Val Thr Cys Glu Lys Arg Arg Thr Arg Gly Leu Ser
 645 650 655
 Arg Ile Val Pro Lys Ser Lys Glu Phe Ile Glu Thr Glu Ser Ser Ser
 660 665 670
 Ser Ser Ser Ser Ser Asp Ser Asp Leu Glu Ser Glu Gln Glu Glu Tyr
 675 680 685
 Pro Leu Ser Lys Ala Gln Thr Val Ala Ala Ser Ala Ser Ser Gly Asn
 690 695 700
 Asp Gln Arg Leu Lys Glu Ala Ala Ala Asn Gly Ser Gly Pro Arg
 705 710 715 720
 Ala Pro Val Gly Ser Ile Asn Ala Arg Thr Thr Ser Asp Ile Ala Lys
 725 730 735
 Glu Leu Glu Glu Gln Phe Tyr Thr Leu Val Pro Phe Gly Arg Asn Glu
 740 745 750
 Leu Leu Ser Pro Leu Lys Asp Ser Asp Glu Ile Arg Ser Leu Trp Val
 755 760 765
 Lys Ile Asp Leu Thr Leu Leu Ser Arg Ile Pro Glu His Leu Pro Gln
 770 775 780
 Glu Pro Gly Val Leu Ser Ala Pro Ala Thr Lys Asp Ser Glu Ser Ala
 785 790 795 800
 Pro Pro Ser His Thr Ser Asp Thr Pro Ala Glu Lys Ala Leu Pro Lys
 805 810 815
 Ser Lys Arg Lys Arg Lys Cys Asp Asn Glu Asp Asp Tyr Arg Glu Ile
 820 825 830
 Lys Lys Ser Gln Gly Glu Lys Asp Ser Ser Ser Arg Leu Ala Thr Ser
 835 840 845
 Thr Ser Asn Thr Leu Ser Ala Asn His Cys Asn Met Asn Ile Asn Ser

850
 Val Ala Ile Pro Ile Asn 855
 865 Lys Asn Glu Lys Met 860
 Ser Pro Leu Ser Asp 870 Lys Tyr Thr Ser Glu Asp 880
 Thr Ser Ser Ser Arg Pro Asn Gly Asn Ser Leu Phe Thr Ser Ala Ser 895
 900 Ser Ser Lys Lys Pro Lys Ala Asp Ser Gln Leu Gln Pro His Gly Gly 910
 915 Asp Leu Thr Lys Ala Ala His Asn Asn Ser Glu Asn Ile Pro Leu His 925
 930 Lys Ser Arg Pro Gln Thr Lys Pro Trp Ser Pro Gly Ser Asn Gly His 940
 945 Arg Asp Cys Lys Arg Gln Lys Leu Val Phe Asp Asp Met Pro Arg Ser 955
 965 Ala Asp Tyr Phe Met Gln Glu Ala Lys Arg Met Lys His Lys Ala Asp 975
 980 Ala Met Val Glu Lys Phe Gly Lys Ala Leu Asn Tyr Ala Glu Ala Ala 990
 995 1000 1005
 Leu Ser Phe Ile Glu Cys Gly Asn Ala Met Glu Gln Gly Pro Met 1010
 1015 Glu Ser Lys Ser Pro Tyr Tyr Leu Met Tyr Ser Glu Thr Val Glu 1020
 1025 Leu Ile Arg Tyr Ala Met Arg Leu Lys Thr His Ser Gly Pro Asn 1035
 1040 Ala Thr Pro Glu Asp Lys Gln Leu Ala Ala Leu Cys Tyr Arg Cys 1050
 1055 Leu Ala Leu Leu Tyr Trp Arg Met Phe Arg Leu Lys Arg Asp His 1065
 1070 Ala Val Lys Tyr Ser Lys Ala Leu Ile Asp Tyr Phe Lys Asn Ser 1080
 1085 Ser Lys Ala Ala Gln Ala Pro Ser Pro Trp Gly Ala Ser Gly Lys 1095
 1100 Ser Thr Gly Thr Pro Ser Pro Ile Ser Pro Asn Pro Phe Pro Gly 1110
 1115 Ser Ser Val Gly Ser Gln Gly Ser Leu Ser Asn Ala Ser Ala Leu 1125
 1130 Ser Pro Ser Thr Ile Val Ser Ile Pro Gln Arg Ile His Gln Met 1140
 1145 Ala Ala Asn His Val Ser Ile Thr Asn Ser Ile Leu His Ser Tyr 1155
 1160 Asp Tyr Trp Glu Met Ala Asp Asn Leu Ala Lys Glu Asn Arg Glu 1170
 1175 Phe Phe Asn Asp Leu Asp Leu Leu Met Gly Pro Val Thr Leu His 1185
 1190 Ser Ser Met Glu His Leu Val Gln Tyr Ser Gln Gln Gly Leu His 1200
 1205 Trp Leu Arg Asn Ser Ala His Leu Ser 1215
 1220 1225

<210> 220

<211> 680

<212> PRT

<213> Homo sapiens

<400> 220

Met Leu Pro Gln Ile Pro Phe Leu Leu Leu Val Ser Leu Asn Leu Val
 1 5 10 15
 His Gly Val Phe Tyr Ala Glu Arg Tyr Gln Met Pro Thr Gly Ile Lys
 20 25 30
 Gly Pro Leu Pro Asn Thr Lys Thr Gln Phe Phe Ile Pro Tyr Thr Ile
 35 40 45
 Lys Ser Lys Gly Ile Ala Val Arg Gly Glu Gln Gly Thr Pro Gly Pro
 50 55 60
 Pro Gly Pro Ala Gly Pro Arg Gly His Pro Gly Pro Ser Gly Pro Pro
 65 70 75 80
 Gly Lys Pro Gly Tyr Gly Ser Pro Gly Leu Gln Gly Glu Pro Gly Leu
 85 90 95
 Pro Gly Pro Pro Gly Pro Ser Ala Val Gly Lys Pro Gly Val Pro Gly
 100 105 110

Leu Pro Gly Lys Pro Gly Glu Arg Gly Pro Tyr Gly Pro Lys Gly Asp
 115 120 125
 Val Gly Pro Ala Gly Leu Pro Gly Pro Arg Gly Pro Pro Gly Pro Pro
 130 135 140
 Gly Ile Pro Gly Pro Ala Gly Ile Ser Val Pro Gly Lys Pro Gly Gln
 145 150 155 160
 Gln Gly Pro Thr Gly Ala Pro Gly Pro Arg Gly Phe Pro Gly Glu Lys
 165 170 175
 Gly Ala Pro Gly Val Pro Gly Met Asn Gly Gln Lys Gly Glu Met Gly
 180 185 190
 Tyr Gly Ala Pro Gly Arg Pro Gly Glu Arg Gly Leu Pro Gly Pro Gln
 195 200 205
 Gly Pro Thr Gly Pro Ser Gly Pro Pro Gly Val Gly Lys Arg Gly Glu
 210 215 220
 Asn Gly Val Pro Gly Gln Pro Gly Ile Lys Gly Asp Arg Gly Phe Pro
 225 230 235 240
 Gly Glu Met Gly Pro Ile Gly Pro Pro Gly Pro Gln Gly Pro Pro Gly
 245 250 255
 Glu Arg Gly Pro Glu Gly Ile Gly Lys Pro Gly Ala Ala Gly Ala Pro
 260 265 270
 Gly Gln Pro Gly Ile Pro Gly Thr Lys Gly Leu Pro Gly Ala Pro Gly
 275 280 285
 Ile Ala Gly Pro Pro Gly Pro Pro Gly Phe Gly Lys Pro Gly Leu Pro
 290 295 300
 Gly Leu Lys Gly Glu Arg Gly Pro Ala Gly Leu Pro Gly Gly Pro Gly
 305 310 315 320
 Ala Lys Gly Glu Gln Gly Pro Ala Gly Leu Pro Gly Lys Pro Gly Leu
 325 330 335
 Thr Gly Pro Pro Gly Asn Met Gly Pro Gln Gly Pro Lys Gly Ile Pro
 340 345 350
 Gly Ser His Gly Leu Pro Gly Pro Lys Gly Glu Thr Gly Pro Ala Gly
 355 360 365
 Pro Ala Gly Tyr Pro Gly Ala Lys Gly Glu Arg Gly Ser Pro Gly Ser
 370 375 380
 Asp Gly Lys Pro Gly Tyr Pro Gly Lys Pro Gly Leu Asp Gly Pro Lys
 385 390 395 400
 Gly Asn Pro Gly Leu Pro Gly Pro Lys Gly Asp Pro Gly Val Gly Gly
 405 410 415
 Pro Pro Gly Leu Pro Gly Pro Val Gly Pro Ala Gly Ala Lys Gly Met
 420 425 430
 Pro Gly His Asn Gly Glu Ala Gly Pro Arg Gly Ala Pro Gly Ile Pro
 435 440 445
 Gly Thr Arg Gly Pro Ile Gly Pro Pro Gly Ile Pro Gly Phe Pro Gly
 450 455 460
 Ser Lys Gly Asp Pro Gly Ser Pro Gly Pro Pro Gly Pro Ala Gly Ile
 465 470 475 480
 Ala Thr Lys Gly Leu Asn Gly Pro Thr Gly Pro Pro Gly Pro Pro Gly
 485 490 495
 Pro Arg Gly His Ser Gly Glu Pro Gly Leu Pro Gly Pro Pro Gly Pro
 500 505 510
 Pro Gly Pro Pro Gly Gln Ala Val Met Pro Glu Gly Phe Ile Lys Ala
 515 520 525
 Gly Gln Arg Pro Ser Leu Ser Gly Thr Pro Leu Val Ser Ala Asn Gln
 530 535 540
 Gly Val Thr Gly Met Pro Val Ser Ala Phe Thr Val Ile Leu Ser Lys
 545 550 555 560
 Ala Tyr Pro Ala Ile Gly Thr Pro Ile Pro Phe Asp Lys Ile Leu Tyr
 565 570 575
 Asn Arg Gln Gln His Tyr Asp Pro Arg Thr Gly Ile Phe Thr Cys Gln
 580 585 590
 Ile Pro Gly Ile Tyr Tyr Phe Ser Tyr His Val His Val Lys Gly Thr
 595 600 605
 His Val Trp Val Gly Leu Tyr Lys Asn Gly Thr Pro Val Met Tyr Thr
 610 615 620
 Tyr Asp Glu Tyr Thr Lys Gly Tyr Leu Asp Gln Ala Ser Gly Ser Ala
 625 630 635 640
 Ile Ile Asp Leu Thr Glu Asn Asp Gln Val Trp Leu Gln Leu Pro Asn
 645 650 655
 Ala Glu Ser Asn Gly Leu Tyr Ser Ser Glu Tyr Val His Ser Ser Phe

660
 Ser Gly Phe Leu Val Ala Pro Met
 675 680

665
 670

<210> 221
 <211> 622
 <212> PRT
 <213> Homo sapiens
 <400> 221

Met Gly Leu Tyr Gly Gln Ala Cys Pro Ser Val Thr Ser Leu Arg Met
 1 5 10 15
 Thr Ser Glu Leu Glu Ser Ser Leu Thr Ser Met Asp Trp Leu Pro Gln
 20 25 30
 Leu Thr Met Arg Ala Ala Ile Gln Lys Ser Asp Ala Thr Gln Asn Ala
 35 40 45
 His Gly Thr Gly Ile Ser Lys Lys Asn Ala Leu Leu Asp Pro Asn Thr
 50 55 60
 Thr Leu Asp Gln Glu Glu Val Gln Gln His Lys Asp Gly Lys Pro Pro
 65 70 75 80
 Tyr Ser Tyr Ala Ser Leu Ile Thr Phe Ala Ile Asn Ser Ser Pro Lys
 85 90 95
 Lys Lys Met Thr Leu Ser Glu Ile Tyr Gln Trp Ile Cys Asp Asn Phe
 100 105 110
 Pro Tyr Tyr Arg Glu Ala Gly Ser Gly Trp Lys Asn Ser Ile Arg His
 115 120 125
 Asn Leu Ser Leu Asn Lys Cys Phe Leu Lys Val Pro Arg Ser Lys Asp
 130 135 140
 Asp Pro Gly Lys Gly Ser Tyr Trp Ala Ile Asp Thr Asn Pro Lys Glu
 145 150 155 160
 Asp Ala Leu Pro Thr Arg Pro Lys Lys Arg Ala Arg Ser Val Glu Arg
 165 170 175
 Ala Ser Thr Pro Tyr Ser Ile Asp Ser Asp Ser Leu Gly Met Glu Cys
 180 185 190
 Ile Ile Ser Gly Ser Ala Ser Pro Thr Leu Ala Ile Asn Thr Val Thr
 195 200 205
 Asn Lys Val Thr Leu Tyr Asn Thr Asp Gln Asp Gly Ser Asp Ser Pro
 210 215 220
 Arg Ser Ser Leu Asn Asn Ser Leu Ser Asp Gln Ser Leu Ala Ser Val
 225 230 235 240
 Asn Leu Asn Ser Val Gly Ser Val His Ser Tyr Thr Pro Val Thr Ser
 245 250 255
 His Pro Glu Ser Val Ser Gln Ser Leu Thr Pro Gln Gln Gln Pro Gln
 260 265 270
 Tyr Asn Leu Pro Glu Arg Asp Lys Gln Leu Leu Phe Ser Glu Tyr Asn
 275 280 285
 Phe Glu Asp Leu Ser Ala Ser Phe Arg Ser Leu Tyr Lys Ser Val Phe
 290 295 300
 Glu Gln Ser Leu Ser Gln Gln Gly Leu Met Asn Ile Pro Ser Glu Ser
 305 310 315 320
 Ser Gln Gln Ser His Thr Ser Cys Thr Tyr Gln His Ser Pro Ser Ser
 325 330 335
 Thr Val Ser Thr His Pro His Ser Asn Gln Ser Ser Leu Ser Asn Ser
 340 345 350
 His Gly Ser Gly Leu Asn Thr Thr Gly Ser Asn Ser Val Ala Gln Val
 355 360 365
 Ser Leu Ser His Pro Gln Met His Pro Gln Pro Ser Pro His Pro Pro
 370 375 380
 His Arg Pro His Gly Leu Pro Gln His Pro Gln Arg Ser Pro His Pro
 385 390 395 400
 Ala Pro His Pro Gln Gln His Ser Gln Leu Gln Ser Pro His Pro Gln
 405 410 415
 His Pro Ser Pro His Gln His Ile Gln His His Pro Asn His Gln His
 420 425 430
 Gln Thr Leu Thr His Gln Ala Pro Pro Pro Gln Gln Val Ser Cys
 435 440 445
 Asn Ser Gly Val Ser Asn Asp Trp Tyr Ala Thr Leu Asp Met Leu Lys
 450 455 460
 Glu Ser Cys Arg Ile Ala Ser Ser Val Asn Trp Ser Asp Val Asp Leu
 465 470 475 480

Ser Gln Phe Gln Gly Leu Met Glu Ser Met Arg Gln Ala Asp Leu Lys
 485 490 495
 Asn Trp Ser Leu Asp Gln Val Gln Phe Ala Asp Leu Cys Ser Ser Leu
 500 505 510
 Asn Gln Phe Phe Thr Gln Thr Gly Leu Ile His Ser Gln Ser Asn Val
 515 520 525
 Gln Gln Asn Val Cys His Gly Ala Met His Pro Thr Lys Pro Ser Gln
 530 535 540
 His Ile Gly Thr Gly Asn Leu Tyr Ile Asp Ser Arg Gln Asn Leu Pro
 545 550 555 560
 Pro Ser Val Met Pro Pro Pro Gly Tyr Pro His Ile Pro Gln Ala Leu
 565 570 575
 Ser Thr Pro Gly Thr Thr Met Ala Gly His His Arg Ala Met Asn Gln
 580 585 590
 Gln His Met Met Pro Ser Gln Ala Phe Gln Met Arg Arg Ser Leu Pro
 595 600 605
 Pro Asp Ile Gln Asp Asp Phe Asp Trp Asp Ser Ile Val
 610 615 620

<210> 222
 <211> 441
 <212> PRT
 <213> Homo sapiens
 <400> 222

Met Val Pro Pro Lys Leu His Val Leu Phe Cys Leu Cys Gly Cys Leu
 1 5 10 15
 Ala Val Val Tyr Pro Phe Asp Trp Gln Tyr Ile Asn Pro Val Ala His
 20 25 30
 Met Lys Ser Ser Ala Trp Val Asn Lys Ile Gln Val Leu Met Ala Ala
 35 40 45
 Ala Ser Phe Gly Gln Thr Lys Ile Pro Arg Gly Asn Gly Pro Tyr Ser
 50 55 60
 Val Gly Cys Thr Asp Leu Met Phe Asp His Thr Asn Lys Gly Thr Phe
 65 70 75 80
 Leu Arg Leu Tyr Tyr Pro Ser Gln Asp Asn Asp Arg Leu Asp Thr Leu
 85 90 95
 Trp Ile Pro Asn Lys Glu Tyr Phe Trp Gly Leu Ser Lys Phe Leu Gly
 100 105 110
 Thr His Trp Leu Met Gly Asn Ile Leu Arg Leu Leu Phe Gly Ser Met
 115 120 125
 Thr Thr Pro Ala Asn Trp Asn Ser Pro Leu Arg Pro Gly Glu Lys Tyr
 130 135 140
 Pro Leu Val Val Phe Ser His Gly Leu Gly Ala Phe Arg Thr Leu Tyr
 145 150 155 160
 Ser Ala Ile Gly Ile Asp Leu Ala Ser His Gly Phe Ile Val Ala Ala
 165 170 175
 Val Glu His Arg Asp Arg Ser Ala Ser Ala Thr Tyr Tyr Phe Lys Asp
 180 185 190
 Gln Ser Ala Ala Glu Ile Gly Asp Lys Ser Trp Leu Tyr Leu Arg Thr
 195 200 205
 Leu Lys Gln Glu Glu Glu Thr His Ile Arg Asn Glu Gln Val Arg Gln
 210 215 220
 Arg Ala Lys Glu Cys Ser Gln Ala Leu Ser Leu Ile Leu Asp Ile Asp
 225 230 235 240
 His Gly Lys Pro Val Lys Asn Ala Leu Asp Leu Lys Phe Asp Met Glu
 245 250 255
 Gln Leu Lys Asp Ser Ile Asp Arg Glu Lys Ile Ala Val Ile Gly His
 260 265 270
 Ser Phe Gly Gly Ala Thr Val Ile Gln Thr Leu Ser Glu Asp Gln Arg
 275 280 285
 Phe Arg Cys Gly Ile Ala Leu Asp Ala Trp Met Phe Pro Leu Gly Asp
 290 295 300
 Glu Val Tyr Ser Arg Ile Pro Gln Pro Leu Phe Phe Ile Asn Ser Glu
 305 310 315 320
 Tyr Phe Gln Tyr Pro Ala Asn Ile Ile Lys Met Lys Lys Cys Tyr Ser
 325 330 335
 Pro Asp Lys Glu Arg Lys Met Ile Thr Ile Arg Gly Ser Val His Gln
 340 345 350
 Asn Phe Ala Asp Phe Thr Phe Ala Thr Gly Lys Ile Ile Gly His Met

355
 Leu Lys Leu Lys Gly Asp Ile 360
 370 375
 Asn Lys Ala Ser Leu Ala Phe Leu Gln Lys His Ala Ile Asp Leu Ser
 385 390 395 400
 Asp Phe Asp Gln Trp Asp Cys Leu Ile Glu Gly Asp Asp Glu Asn Leu
 405 410 415
 Ile Pro Gly Thr Asn Ile Asn Thr Thr Asn Gln His Ile Met Leu Gln
 420 425 430
 Asn Ser Ser Gly Ile Glu Lys Tyr Asn
 435 440

<210> 223
 <211> 148
 <212> PRT
 <213> Homo sapiens
 <400> 223

Met Arg Gly Arg Glu Leu Pro Leu Val Leu Leu Ala Leu Val Leu Cys
 1 5 10 15
 Leu Ala Pro Arg Gly Arg Ala Val Pro Leu Pro Ala Gly Gly Gly Thr
 20 25 30
 Val Leu Thr Lys Met Tyr Pro Arg Gly Asn His Trp Ala Val Gly His
 35 40 45
 Leu Met Gly Lys Lys Ser Thr Gly Glu Ser Ser Ser Val Ser Glu Arg
 50 55 60
 Gly Ser Leu Lys Gln Gln Leu Arg Glu Tyr Ile Arg Trp Glu Glu Ala
 65 70 75 80
 Ala Arg Asn Leu Leu Gly Leu Ile Glu Ala Lys Glu Asn Arg Asn His
 85 90 95
 Gln Pro Pro Gln Pro Lys Ala Leu Gly Asn Gln Gln Pro Ser Trp Asp
 100 105 110
 Ser Glu Asp Ser Ser Asn Phe Lys Asp Val Gly Ser Lys Gly Lys Val
 115 120 125
 Gly Arg Leu Ser Ala Pro Gly Ser Gln Arg Glu Gly Arg Asn Pro Gln
 130 135 140
 Leu Asn Gln Gln
 145

<210> 224
 <211> 491
 <212> PRT
 <213> Homo sapiens
 <400> 224

Met Glu Leu Ser Val Leu Leu Phe Leu Ala Leu Leu Thr Gly Leu Leu
 1 5 10 15
 Leu Leu Leu Val Gln Arg His Pro Asn Thr His Asp Arg Leu Pro Pro
 20 25 30
 Gly Pro Arg Pro Leu Pro Leu Leu Gly Asn Leu Leu Gln Met Asp Arg
 35 40 45
 Arg Gly Leu Leu Lys Ser Phe Leu Arg Phe Arg Glu Lys Tyr Gly Asp
 50 55 60
 Val Phe Thr Val His Leu Gly Pro Arg Pro Val Val Met Leu Cys Gly
 65 70 75 80
 Val Glu Ala Ile Arg Glu Ala Leu Val Asp Lys Ala Glu Ala Phe Ser
 85 90 95
 Gly Arg Gly Lys Ile Ala Met Val Asp Pro Phe Phe Arg Gly Tyr Gly
 100 105 110
 Val Ile Phe Ala Asn Gly Asn Arg Trp Lys Val Leu Arg Arg Phe Ser
 115 120 125
 Val Thr Thr Met Arg Asp Phe Gly Met Gly Lys Arg Ser Val Glu Glu
 130 135 140
 Arg Ile Gln Glu Glu Ala Gln Cys Leu Ile Glu Glu Leu Arg Lys Ser
 145 150 155 160
 Lys Gly Ala Leu Met Asp Pro Thr Phe Leu Phe Gln Ser Ile Thr Ala
 165 170 175
 Asn Ile Ile Cys Ser Ile Val Phe Gly Lys Arg Phe His Tyr Gln Asp
 180 185 190
 Gln Glu Phe Leu Lys Met Leu Asn Leu Phe Tyr Gln Thr Phe Ser Leu
 195 200 205

Ile Ser Ser Val Phe Gly Gln Leu Phe Glu Leu Phe Ser Gly Phe Leu
 210 215 220
 Lys Tyr Phe Pro Gly Ala His Arg Gln Val Tyr Lys Asn Leu Gln Glu
 225 230 235 240
 Ile Asn Ala Tyr Ile Gly His Ser Val Glu Lys His Arg Glu Thr Leu
 245 250 255
 Asp Pro Ser Ala Pro Lys Asp Leu Ile Asp Thr Tyr Leu Leu His Met
 260 265 270
 Glu Lys Glu Lys Ser Asn Ala His Ser Glu Phe Ser His Gln Asn Leu
 275 280 285
 Asn Leu Asn Thr Leu Ser Leu Phe Phe Ala Gly Thr Glu Thr Thr Ser
 290 295 300
 Thr Thr Leu Arg Tyr Gly Phe Leu Leu Met Leu Lys Tyr Pro His Val
 305 310 315 320
 Ala Glu Arg Val Tyr Arg Glu Ile Glu Gln Val Ile Gly Pro His Arg
 325 330 335
 Pro Pro Glu Leu His Asp Arg Ala Lys Met Pro Tyr Thr Glu Ala Val
 340 345 350
 Ile Tyr Glu Ile Gln Arg Phe Ser Asp Leu Leu Pro Met Gly Val Pro
 355 360 365
 His Ile Val Thr Gln His Thr Ser Phe Arg Gly Tyr Ile Ile Pro Lys
 370 375 380
 Asp Thr Glu Val Phe Leu Ile Leu Ser Thr Ala Leu His Asp Pro His
 385 390 395 400
 Tyr Phe Glu Lys Pro Asp Ala Phe Asn Pro Asp His Phe Leu Asp Ala
 405 410 415
 Asn Gly Ala Leu Lys Lys Thr Glu Ala Phe Ile Pro Phe Ser Leu Gly
 420 425 430
 Lys Arg Ile Cys Leu Gly Glu Gly Ile Ala Arg Ala Glu Leu Phe Leu
 435 440 445
 Phe Phe Thr Thr Ile Leu Gln Asn Phe Ser Met Ala Ser Pro Val Ala
 450 455 460
 Pro Glu Asp Ile Asp Leu Thr Pro Gln Glu Cys Gly Val Gly Lys Ile
 465 470 475 480
 Pro Pro Thr Tyr Gln Ile Arg Phe Leu Pro Arg
 485 490

<210> 225
 <211> 359
 <212> PRT
 <213> Homo sapiens
 <400> 225

Met Val Arg Pro Met Leu Leu Leu Ser Leu Gly Leu Leu Ala Gly Leu
 1 5 10 15
 Leu Pro Ala Leu Ala Ala Cys Pro Gln Asn Cys His Cys His Ser Asp
 20 25 30
 Leu Gln His Val Ile Cys Asp Lys Val Gly Leu Gln Lys Ile Pro Lys
 35 40 45
 Val Ser Glu Lys Thr Lys Leu Leu Asn Leu Gln Arg Asn Asn Phe Pro
 50 55 60
 Val Leu Ala Ala Asn Ser Phe Arg Ala Met Pro Asn Leu Val Ser Leu
 65 70 75 80
 His Leu Gln His Cys Gln Ile Arg Glu Val Ala Ala Gly Ala Phe Arg
 85 90 95
 Gly Leu Lys Gln Leu Ile Tyr Leu Tyr Leu Ser His Asn Asp Ile Arg
 100 105 110
 Val Val Arg Ala Gly Ala Phe Asp Asp Leu Thr Glu Leu Thr Tyr Leu
 115 120 125
 Tyr Leu Asp His Asn Lys Val Thr Glu Leu Pro Arg Gly Leu Leu Ser
 130 135 140
 Pro Leu Val Asn Leu Phe Ile Leu Gln Leu Asn Asn Lys Ile Arg
 145 150 155 160
 Glu Leu Arg Ala Gly Pro Phe Gln Gly Ala Lys Asp Leu Arg Trp Leu
 165 170 175
 Tyr Leu Ser Glu Asn Ala Leu Ser Ser Leu Gln Pro Gly Ala Leu Asp
 180 185 190
 Asp Val Glu Asn Leu Ala Lys Phe His Val Asp Arg Asn Gln Leu Ser
 195 200 205
 Ser Tyr Pro Ser Ala Ala Leu Ser Lys Leu Arg Val Val Glu Glu Leu

210
 Lys Leu Ser His Asn Pro Leu Lys Ser Ile Pro Asp Asn Ala Phe Gln
 225
 Ser Phe Gly Arg Tyr Leu Glu Thr Leu Trp Leu Asp Asn Thr Asn Leu
 240
 Glu Lys Phe Ser Asp Gly Ala Phe Leu Gly Val Thr Thr Leu Lys His
 255
 Val His Leu Glu Asn Asn Arg Leu Asn Gln Leu Pro Ser Asn Phe Pro
 270
 Phe Asp Ser Leu Glu Thr Leu Ala Leu Thr Asn Asn Pro Trp Lys Cys
 285
 Thr Cys Gln Leu Arg Gly Leu Arg Arg Trp Leu Glu Ala Lys Ala Ser
 300
 Arg Pro Asp Ala Thr Cys Ala Ser Pro Ala Lys Phe Lys Gly Gln His
 320
 Ile Arg Asp Thr Asp Ala Phe Arg Ser Cys Lys Phe Pro Thr Lys Arg
 335
 Ser Lys Lys Ala Gly Arg His
 350
 355

<210> 226
 <211> 276
 <212> PRT
 <213> Homo sapiens
 <400> 226

Met Leu Ala Trp Arg Asp Gly Glu Leu Glu Ala Glu Thr Ser Ser Ser
 1 5 10 15
 Leu Phe Leu Leu Ala Met Gln Val Trp Met Cys Gly Gly Arg Met Glu
 20 25 30
 Asp Ile Pro Cys Ser Arg Val Gly His Ile Tyr Arg Lys Tyr Val Pro
 35 40 45
 Tyr Lys Val Pro Ala Gly Val Ser Leu Ala Arg Val Arg Thr Leu Lys
 50 55 60
 Arg Val Ala Glu Val Trp Met Asp Glu Tyr Ala Glu Tyr Ile Tyr Gln
 65 70 75 80
 Arg Arg Pro Glu Tyr Arg His Leu Ser Ala Gly Asp Val Ala Val Gln
 85 90 95
 Lys Lys Leu Arg Ser Ser Leu Asn Cys Lys Ser Phe Lys Trp Phe Met
 100 105 110
 Thr Lys Ile Ala Trp Asp Leu Pro Lys Phe Tyr Pro Pro Val Glu Pro
 115 120 125
 Pro Ala Ala Ala Trp Gly Glu Ile Arg Asn Val Gly Thr Gly Leu Cys
 130 135 140
 Ala Asp Thr Lys His Gly Ala Leu Gly Ser Pro Leu Arg Leu Glu Gly
 145 150 155 160
 Cys Val Arg Gly Arg Gly Glu Ala Ala Trp Asn Asn Met Gln Val Phe
 165 170 175
 Thr Phe Thr Trp Arg Glu Asp Ile Arg Pro Gly Asp Pro Gln His Thr
 180 185 190
 Lys Lys Phe Cys Phe Asp Ala Ile Ser His Thr Ser Pro Val Thr Leu
 195 200 205
 Tyr Asp Cys His Ser Met Lys Gly Asn Gln Leu Trp Lys Tyr Arg Lys
 210 215 220
 Asp Lys Thr Leu Tyr His Pro Val Ser Gly Ser Cys Met Asp Cys Ser
 225 230 235 240
 Glu Ser Asp His Arg Ile Phe Met Asn Thr Cys Asn Pro Ser Ser Leu
 245 250 255
 Thr Gln Gln Trp Leu Phe Glu His Thr Asn Ser Thr Val Leu Glu Lys
 260 265 270
 Phe Asn Arg Asn
 275

<210> 227
 <211> 161
 <212> PRT
 <213> Homo sapiens
 <400> 227

Met Thr Leu Glu Glu Leu Val Ala Cys Asp Asn Ala Ala Gln Lys Met
 1 5 10 15

Gln Thr Val Thr Ala Ala Val Glu Glu Leu Leu Val Ala Ala Gln Arg
 20 25 30
 Gln Asp Arg Leu Thr Val Gly Val Tyr Glu Ser Ala Lys Leu Met Asn
 35 40 45
 Val Asp Pro Asp Ser Val Val Leu Cys Leu Leu Ala Ile Asp Glu Glu
 50 55 60
 Glu Glu Asp Asp Ile Ala Leu Gln Ile His Phe Thr Leu Ile Gln Ser
 65 70 75 80
 Phe Cys Cys Asp Asn Asp Ile Asn Ile Val Arg Val Ser Gly Asn Ala
 85 90 95
 Arg Leu Ala Gln Leu Leu Gly Glu Pro Ala Glu Thr Gln Gly Thr Thr
 100 105 110
 Glu Ala Arg Asp Leu His Cys Leu Pro Phe Leu Gln Asn Pro His Thr
 115 120 125
 Asp Ala Trp Lys Ser His Gly Leu Val Glu Val Ala Ser Tyr Cys Glu
 130 135 140
 Glu Ser Arg Gly Asn Asn Gln Trp Val Pro Tyr Ile Ser Leu Gln Glu
 145 150 155 160
 Arg

<210> 228
 <211> 281
 <212> PRT
 <213> Homo sapiens
 <400> 228

Met Ala Ser Arg Gly Arg Arg Pro Glu His Gly Gly Pro Pro Glu Leu
 1 5 10 15
 Phe Tyr Asp Glu Thr Glu Ala Arg Lys Tyr Val Arg Asn Ser Arg Met
 20 25 30
 Ile Asp Ile Gln Thr Arg Met Ala Gly Arg Ala Leu Glu Leu Tyr
 35 40 45
 Leu Pro Glu Asn Lys Pro Cys Tyr Leu Leu Asp Ile Gly Cys Gly Thr
 50 55 60
 Gly Leu Ser Gly Ser Tyr Leu Ser Asp Glu Gly His Tyr Trp Val Gly
 65 70 75 80
 Leu Asp Ile Ser Pro Ala Met Leu Asp Glu Ala Val Asp Arg Glu Ile
 85 90 95
 Glu Gly Asp Leu Leu Gly Asp Met Gly Gln Gly Ile Pro Phe Lys
 100 105 110
 Pro Gly Thr Phe Asp Gly Cys Ile Ser Ile Ser Ala Val Gln Trp Leu
 115 120 125
 Cys Asn Ala Asn Lys Lys Ser Glu Asn Pro Ala Lys Arg Leu Tyr Cys
 130 135 140
 Phe Phe Ala Ser Leu Phe Ser Val Leu Val Arg Gly Ser Arg Ala Val
 145 150 155 160
 Leu Gln Leu Tyr Pro Glu Asn Ser Glu Gln Leu Glu Leu Ile Thr Thr
 165 170 175
 Gln Ala Thr Lys Ala Gly Phe Ser Gly Gly Met Val Val Asp Tyr Pro
 180 185 190
 Asn Ser Ala Lys Ala Lys Lys Phe Tyr Leu Cys Leu Phe Ser Gly Pro
 195 200 205
 Ser Thr Phe Ile Pro Glu Gly Leu Ser Glu Asn Gln Asp Glu Val Glu
 210 215 220
 Pro Arg Glu Ser Val Phe Thr Asn Glu Arg Phe Pro Leu Arg Met Ser
 225 230 235 240
 Arg Arg Gly Met Val Arg Lys Ser Arg Ala Trp Val Leu Glu Lys Lys
 245 250 255
 Glu Arg His Arg Arg Gln Gly Arg Glu Val Arg Pro Asp Thr Gln Tyr
 260 265 270
 Thr Gly Arg Lys Arg Lys Pro Arg Phe
 275 280

<210> 229
 <211> 525
 <212> PRT
 <213> Homo sapiens
 <400> 229

Met Ala Ala Gly Gly Ser Gly Gly Arg Ala Ser Cys Pro Pro Gly Val

1				5					10					15	
Gly	Val	Gly	Pro	Gly	Thr	Gly	Gly	Ser	Pro	Gly	Pro	Ser	Ala	Asn	Ala
			20					25					30		
Ala	Ala	Thr	Pro	Ala	Pro	Gly	Asn	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala
		35					40					45			
Ala	Ala	Ala	Ala	Ala	Ala	Pro	Gly	Pro	Thr	Pro	Pro	Ala	Pro	Pro	Gly
	50					55					60				
Pro	Gly	Thr	Asp	Ala	Gln	Ala	Ala	Gly	Ala	Glu	Arg	Ala	Glu	Glu	Ala
65				70						75					80
Ala	Gly	Pro	Gly	Ala	Ala	Ala	Leu	Gln	Arg	Glu	Ala	Ala	Tyr	Asn	Trp
			85						90					95	
Gln	Ala	Ser	Lys	Pro	Thr	Val	Gln	Glu	Arg	Phe	Ala	Phe	Leu	Phe	Asn
			100					105					110		
Asn	Glu	Val	Leu	Cys	Asp	Val	His	Phe	Leu	Val	Gly	Lys	Gly	Leu	Ser
		115					120					125			
Ser	Gln	Arg	Ile	Pro	Ala	His	Arg	Phe	Val	Leu	Ala	Val	Gly	Ser	Ala
	130				135						140				
Val	Phe	Asp	Ala	Met	Phe	Asn	Gly	Gly	Met	Ala	Thr	Thr	Ser	Thr	Glu
145				150						155					160
Ile	Glu	Leu	Pro	Asp	Val	Glu	Pro	Ala	Ala	Phe	Leu	Ala	Leu	Leu	Lys
			165					170						175	
Phe	Leu	Tyr	Ser	Asp	Glu	Val	Gln	Ile	Gly	Pro	Glu	Thr	Val	Met	Thr
			180					185					190		
Thr	Leu	Tyr	Thr	Ala	Lys	Lys	Tyr	Ala	Val	Pro	Ala	Leu	Glu	Ala	His
	195						200					205			
Cys	Val	Glu	Phe	Leu	Lys	Lys	Asn	Leu	Arg	Ala	Asp	Asn	Ala	Phe	Met
	210				215						220				
Leu	Leu	Thr	Gln	Ala	Arg	Leu	Phe	Asp	Glu	Pro	Gln	Leu	Ala	Ser	Leu
225				230					235						240
Cys	Leu	Glu	Asn	Ile	Asp	Lys	Asn	Thr	Ala	Asp	Ala	Ile	Thr	Ala	Glu
			245					250						255	
Gly	Phe	Thr	Asp	Ile	Asp	Leu	Asp	Thr	Leu	Val	Ala	Val	Leu	Glu	Arg
		260					265						270		
Asp	Thr	Leu	Gly	Ile	Arg	Glu	Val	Arg	Leu	Phe	Asn	Ala	Val	Val	Arg
	275						280					285			
Trp	Ser	Glu	Ala	Glu	Cys	Gln	Arg	Gln	Gln	Leu	Gln	Val	Thr	Pro	Glu
	290					295					300				
Asn	Arg	Arg	Lys	Val	Leu	Gly	Lys	Ala	Leu	Gly	Leu	Ile	Arg	Phe	Pro
305				310						315					320
Leu	Met	Thr	Ile	Glu	Glu	Phe	Ala	Ala	Gly	Pro	Ala	Gln	Ser	Gly	Ile
			325						330					335	
Leu	Val	Asp	Arg	Glu	Val	Val	Ser	Leu	Phe	Leu	His	Phe	Thr	Val	Asn
		340						345					350		
Pro	Lys	Pro	Arg	Val	Glu	Phe	Ile	Asp	Arg	Pro	Arg	Cys	Cys	Leu	Arg
	355						360					365			
Gly	Lys	Glu	Cys	Ser	Ile	Asn	Arg	Phe	Gln	Gln	Val	Glu	Ser	Arg	Trp
	370					375					380				
Gly	Tyr	Ser	Gly	Thr	Ser	Asp	Arg	Ile	Arg	Phe	Ser	Val	Asn	Lys	Arg
385				390						395				400	
Ile	Phe	Val	Val	Gly	Phe	Gly	Leu	Tyr	Gly	Ser	Ile	His	Gly	Pro	Thr
			405						410					415	
Asp	Tyr	Gln	Val	Asn	Ile	Gln	Ile	Ile	His	Thr	Asp	Ser	Asn	Thr	Val
		420						425					430		
Leu	Gly	Gln	Asn	Asp	Thr	Gly	Phe	Ser	Cys	Asp	Gly	Ser	Ala	Ser	Thr
	435						440					445			
Phe	Arg	Val	Met	Phe	Lys	Glu	Pro	Val	Glu	Val	Leu	Pro	Asn	Val	Asn
	450					455					460				
Tyr	Thr	Ala	Cys	Ala	Thr	Leu	Lys	Gly	Pro	Asp	Ser	His	Tyr	Gly	Thr
465				470						475				480	
Lys	Gly	Leu	Arg	Lys	Val	Thr	His	Glu	Ser	Pro	Thr	Thr	Gly	Ala	Lys
			485						490					495	
Thr	Cys	Phe	Thr	Phe	Cys	Tyr	Ala	Ala	Gly	Asn	Asn	Asn	Gly	Thr	Ser
		500						505					510		
Val	Glu	Asp	Gly	Gln	Ile	Pro	Glu	Val	Ile	Phe	Tyr	Thr			
	515						520								

<210> 230

<211> 933

<212> PRT

<213> Homo sapiens
 <400> 230
 Met Thr Glu Leu Lys Ala Lys Gly Pro Arg Ala Pro His Val Ala Gly
 1 5 10 15
 Gly Pro Pro Ser Pro Glu Val Gly Ser Pro Leu Leu Cys Arg Pro Ala
 20 25 30
 Ala Gly Pro Phe Pro Gly Ser Gln Thr Ser Asp Thr Leu Pro Glu Val
 35 40 45
 Ser Ala Ile Pro Ile Ser Leu Asp Gly Leu Leu Phe Pro Arg Pro Cys
 50 55 60
 Gln Gly Gln Asp Pro Ser Asp Glu Lys Thr Gln Asp Gln Gln Ser Leu
 65 70 75 80
 Ser Asp Val Glu Gly Ala Tyr Ser Arg Ala Glu Ala Thr Arg Gly Ala
 85 90 95
 Gly Gly Ser Ser Ser Ser Pro Pro Glu Lys Asp Ser Gly Leu Leu Asp
 100 105 110
 Ser Val Leu Asp Thr Leu Leu Ala Pro Ser Gly Pro Gly Gln Ser Gln
 115 120 125
 Pro Ser Pro Pro Ala Cys Glu Val Thr Ser Ser Trp Cys Leu Phe Gly
 130 135 140
 Pro Glu Leu Pro Glu Asp Pro Pro Ala Ala Pro Ala Thr Gln Arg Val
 145 150 155 160
 Leu Ser Pro Leu Met Ser Arg Ser Gly Cys Lys Val Gly Asp Ser Ser
 165 170 175
 Gly Thr Ala Ala Ala His Lys Val Leu Pro Arg Gly Leu Ser Pro Ala
 180 185 190
 Arg Gln Leu Leu Leu Pro Ala Ser Glu Ser Pro His Trp Ser Gly Ala
 195 200 205
 Pro Val Lys Pro Ser Pro Gln Ala Ala Ala Val Glu Val Glu Glu Glu
 210 215 220
 Asp Ser Ser Glu Ser Glu Glu Ser Ala Gly Pro Leu Leu Lys Gly Lys
 225 230 235 240
 Pro Arg Ala Leu Gly Gly Ala Ala Ala Gly Gly Ala Ala Ala Cys
 245 250 255
 Pro Pro Gly Ala Ala Ala Gly Gly Val Ala Leu Val Pro Lys Glu Asp
 260 265 270
 Ser Arg Phe Ser Ala Pro Arg Val Ala Leu Val Glu Gln Asp Ala Pro
 275 280 285
 Met Ala Pro Gly Arg Ser Pro Leu Ala Thr Thr Val Met Asp Phe Ile
 290 295 300
 His Val Pro Ile Leu Pro Leu Asn His Ala Leu Leu Ala Ala Arg Thr
 305 310 315 320
 Arg Gln Leu Leu Glu Asp Glu Ser Tyr Asp Gly Gly Ala Gly Ala Ala
 325 330 335
 Ser Ala Phe Ala Pro Pro Arg Thr Ser Pro Cys Ala Ser Ser Thr Pro
 340 345 350
 Val Ala Val Gly Asp Phe Pro Asp Cys Ala Tyr Pro Pro Asp Ala Glu
 355 360 365
 Pro Lys Asp Asp Ala Tyr Pro Leu Tyr Ser Asp Phe Gln Pro Pro Ala
 370 375 380
 Leu Lys Ile Lys Glu Glu Glu Gly Ala Glu Ala Ser Ala Arg Ser
 385 390 395 400
 Pro Arg Ser Tyr Leu Val Ala Gly Ala Asn Pro Ala Ala Phe Pro Asp
 405 410 415
 Phe Pro Leu Gly Pro Pro Pro Pro Leu Pro Pro Arg Ala Thr Pro Ser
 420 425 430
 Arg Pro Gly Glu Ala Ala Val Thr Ala Ala Pro Ala Ser Ala Ser Val
 435 440 445
 Ser Ser Ala Ser Ser Ser Gly Ser Thr Leu Glu Cys Ile Leu Tyr Lys
 450 455 460
 Ala Glu Gly Ala Pro Pro Gln Gln Gly Pro Phe Ala Pro Pro Pro Cys
 465 470 475 480
 Lys Ala Pro Gly Ala Ser Gly Cys Leu Leu Pro Arg Asp Gly Leu Pro
 485 490 495
 Ser Thr Ser Ala Ser Ala Ala Ala Ala Gly Ala Ala Pro Ala Leu Tyr
 500 505 510
 Pro Ala Leu Gly Leu Asn Gly Leu Pro Gln Leu Gly Tyr Gln Ala Ala
 515 520 525
 Val Leu Lys Glu Gly Leu Pro Gln Val Tyr Pro Pro Tyr Leu Asn Tyr

530
 Leu Arg Pro Asp Ser Glu Ala Ser Gln Ser Pro Gln Tyr Ser Phe Glu
 545 550 555 560
 Ser Leu Pro Gln Lys Ile Cys Leu Ile Cys Gly Asp Glu Ala Ser Gly
 565 570 575
 Cys His Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe Lys
 580 585 590
 Arg Ala Met Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn Asp
 595 600 605
 Cys Ile Val Asp Lys Ile Arg Arg Lys Asn Cys Pro Ala Cys Arg Leu
 610 615 620
 Arg Lys Cys Cys Gln Ala Gly Met Val Leu Gly Gly Arg Lys Phe Lys
 625 630 635 640
 Lys Phe Asn Lys Val Arg Val Val Arg Ala Leu Asp Ala Val Ala Leu
 645 650 655
 Pro Gln Pro Leu Gly Val Pro Asn Glu Ser Gln Ala Leu Ser Gln Arg
 660 665 670
 Phe Thr Phe Ser Pro Gly Gln Asp Ile Gln Leu Ile Pro Pro Leu Ile
 675 680 685
 Asn Leu Leu Met Ser Ile Glu Pro Asp Val Ile Tyr Ala Gly His Asp
 690 695 700
 Asn Thr Lys Pro Asp Thr Ser Ser Ser Leu Leu Thr Ser Leu Asn Gln
 705 710 715 720
 Leu Gly Glu Arg Gln Leu Leu Ser Val Val Lys Trp Ser Lys Ser Leu
 725 730 735
 Pro Gly Phe Arg Asn Leu His Ile Asp Asp Gln Ile Thr Leu Ile Gln
 740 745 750
 Tyr Ser Trp Met Ser Leu Met Val Phe Gly Leu Gly Trp Arg Ser Tyr
 755 760 765
 Lys His Val Ser Gly Gln Met Leu Tyr Phe Ala Pro Asp Leu Ile Leu
 770 775 780
 Asn Glu Gln Arg Met Lys Glu Ser Ser Phe Tyr Ser Leu Cys Leu Thr
 785 790 795 800
 Met Trp Gln Ile Pro Gln Glu Phe Val Lys Leu Gln Val Ser Gln Glu
 805 810 815
 Glu Phe Leu Cys Met Lys Val Leu Leu Leu Asn Thr Ile Pro Leu
 820 825 830
 Glu Gly Leu Arg Ser Gln Thr Gln Phe Glu Glu Met Arg Ser Ser Tyr
 835 840 845
 Ile Arg Glu Leu Ile Lys Ala Ile Gly Leu Arg Gln Lys Gly Val Val
 850 855 860
 Ser Ser Ser Gln Arg Phe Tyr Gln Leu Thr Lys Leu Leu Asp Asn Leu
 865 870 875 880
 His Asp Leu Val Lys Gln Leu His Leu Tyr Cys Leu Asn Thr Phe Ile
 885 890 895
 Gln Ser Arg Ala Leu Ser Val Glu Phe Pro Glu Met Met Ser Glu Val
 900 905 910
 Ile Ala Ala Gln Leu Pro Lys Ile Leu Ala Gly Met Val Lys Pro Leu
 915 920 925
 Leu Phe His Lys Lys
 930

<210> 231

<211> 186

<212> PRT

<213> Homo sapiens

<400> 231

Met Asp Ala Asp Ser Asp Val Ala Leu Asp Ile Leu Ile Thr Asn Val
 1 5 10 15
 Val Cys Val Phe Arg Thr Arg Cys His Leu Asn Leu Arg Lys Ile Ala
 20 25 30
 Leu Glu Gly Ala Asn Val Ile Tyr Lys Arg Asp Val Gly Lys Val Leu
 35 40 45
 Met Lys Leu Arg Lys Pro Arg Ile Thr Ala Thr Ile Trp Ser Ser Gly
 50 55 60
 Lys Ile Ile Cys Thr Gly Ala Thr Ser Glu Glu Glu Ala Lys Phe Gly
 65 70 75 80
 Ala Arg Arg Leu Ala Arg Ser Leu Gln Lys Leu Gly Phe Gln Val Ile
 85 90 95

Phe Thr Asp Phe Lys Val Val Asn Val Leu Ala Val Cys Asn Met Pro
 100 105 110
 Phe Glu Ile Arg Leu Pro Glu Phe Thr Lys Asn Asn Arg Pro His Ala
 115 120 125
 Ser Tyr Glu Pro Glu Leu His Pro Ala Val Cys Tyr Arg Ile Lys Ser
 130 135 140
 Leu Arg Ala Thr Leu Gln Ile Phe Ser Thr Gly Ser Ile Thr Val Thr
 145 150 155 160
 Gly Pro Asn Val Lys Ala Val Ala Thr Ala Val Glu Gln Ile Tyr Pro
 165 170 175
 Phe Val Phe Glu Ser Arg Lys Glu Ile Leu
 180 185

<210> 232
 <211> 1744
 <212> PRT
 <213> Homo sapiens
 <400> 232

Met Arg Leu Leu Trp Gly Leu Ile Trp Ala Ser Ser Phe Phe Thr Leu
 1 5 10 15
 Ser Leu Gln Lys Pro Arg Leu Leu Leu Phe Ser Pro Ser Val Val His
 20 25 30
 Leu Gly Val Pro Leu Ser Val Gly Val Gln Leu Gln Asp Val Pro Arg
 35 40 45
 Gly Gln Val Val Lys Gly Ser Val Phe Leu Arg Asn Pro Ser Arg Asn
 50 55 60
 Asn Val Pro Cys Ser Pro Lys Val Asp Phe Thr Leu Ser Ser Glu Arg
 65 70 75 80
 Asp Phe Ala Leu Leu Ser Leu Gln Val Pro Leu Lys Asp Ala Lys Ser
 85 90 95
 Cys Gly Leu His Gln Leu Leu Arg Gly Pro Glu Val Gln Leu Val Ala
 100 105 110
 His Ser Pro Trp Leu Lys Asp Ser Leu Ser Arg Thr Thr Asn Ile Gln
 115 120 125
 Gly Ile Asn Leu Leu Phe Ser Ser Arg Arg Gly His Leu Phe Leu Gln
 130 135 140
 Thr Asp Gln Pro Ile Tyr Asn Pro Gly Gln Arg Val Arg Tyr Arg Val
 145 150 155 160
 Phe Ala Leu Asp Gln Lys Met Arg Pro Ser Thr Asp Thr Ile Thr Val
 165 170 175
 Met Val Glu Asn Ser His Gly Leu Arg Val Arg Lys Lys Glu Val Tyr
 180 185 190
 Met Pro Ser Ser Ile Phe Gln Asp Asp Phe Val Ile Pro Asp Ile Ser
 195 200 205
 Glu Pro Gly Thr Trp Lys Ile Ser Ala Arg Phe Ser Asp Gly Leu Glu
 210 215 220
 Ser Asn Ser Ser Thr Gln Phe Glu Val Lys Lys Tyr Val Leu Pro Asn
 225 230 235 240
 Phe Glu Val Lys Ile Thr Pro Gly Lys Pro Tyr Ile Leu Thr Val Pro
 245 250 255
 Gly His Leu Asp Glu Met Gln Leu Asp Ile Gln Ala Arg Tyr Ile Tyr
 260 265 270
 Gly Lys Pro Val Gln Gly Val Ala Tyr Val Arg Phe Gly Leu Leu Asp
 275 280 285
 Glu Asp Gly Lys Lys Thr Phe Phe Arg Gly Leu Glu Ser Gln Thr Lys
 290 295 300
 Leu Val Asn Gly Gln Ser His Ile Ser Leu Ser Lys Ala Glu Phe Gln
 305 310 315 320
 Asp Ala Leu Glu Lys Leu Asn Met Gly Ile Thr Asp Leu Gln Gly Leu
 325 330 335
 Arg Leu Tyr Val Ala Ala Ala Ile Ile Glu Tyr Pro Gly Gly Glu Met
 340 345 350
 Glu Glu Ala Glu Leu Thr Ser Trp Tyr Phe Val Ser Ser Pro Phe Ser
 355 360 365
 Leu Asp Leu Ser Lys Thr Lys Arg His Leu Val Pro Gly Ala Pro Phe
 370 375 380
 Leu Leu Gln Ala Leu Val Arg Glu Met Ser Gly Ser Pro Ala Ser Gly
 385 390 395 400
 Ile Pro Val Lys Val Ser Ala Thr Val Ser Ser Pro Gly Ser Val Pro

				405					410				415		
Glu	Val	Gln	Asp	Ile	Gln	Gln	Asn	Thr	Asp	Gly	Ser	Gly	Gln	Val	Ser
			420					425					430		
Ile	Pro	Ile	Ile	Ile	Pro	Gln	Thr	Ile	Ser	Glu	Leu	Gln	Leu	Ser	Val
		435					440					445			
Ser	Ala	Gly	Ser	Pro	His	Pro	Ala	Ile	Ala	Arg	Leu	Thr	Val	Ala	Ala
	450					455					460				
Pro	Pro	Ser	Gly	Gly	Pro	Gly	Phe	Leu	Ser	Ile	Glu	Arg	Pro	Asp	Ser
465					470				475						480
Arg	Pro	Pro	Arg	Val	Gly	Asp	Thr	Leu	Asn	Leu	Asn	Leu	Arg	Ala	Val
				485					490					495	
Gly	Ser	Gly	Ala	Thr	Phe	Ser	His	Tyr	Tyr	Tyr	Met	Ile	Leu	Ser	Arg
			500					505					510		
Gly	Gln	Ile	Val	Phe	Met	Asn	Arg	Glu	Pro	Lys	Arg	Thr	Leu	Thr	Ser
		515					520					525			
Val	Ser	Val	Phe	Val	Asp	His	His	Leu	Ala	Pro	Ser	Phe	Tyr	Phe	Val
	530					535					540				
Ala	Phe	Tyr	Tyr	His	Gly	Asp	His	Pro	Val	Ala	Asn	Ser	Leu	Arg	Val
545					550					555					560
Asp	Val	Gln	Ala	Gly	Ala	Cys	Glu	Gly	Lys	Leu	Glu	Leu	Ser	Val	Asp
				565					570					575	
Gly	Ala	Lys	Gln	Tyr	Arg	Asn	Gly	Glu	Ser	Val	Lys	Leu	His	Leu	Glu
			580				585						590		
Thr	Asp	Ser	Leu	Ala	Leu	Val	Ala	Leu	Gly	Ala	Leu	Asp	Thr	Ala	Leu
		595				600						605			
Tyr	Ala	Ala	Gly	Ser	Lys	Ser	His	Lys	Pro	Leu	Asn	Met	Gly	Lys	Val
	610					615					620				
Phe	Glu	Ala	Met	Asn	Ser	Tyr	Asp	Leu	Gly	Cys	Gly	Pro	Gly	Gly	Gly
625				630					635						640
Asp	Ser	Ala	Leu	Gln	Val	Phe	Gln	Ala	Ala	Gly	Leu	Ala	Phe	Ser	Asp
				645					650					655	
Gly	Asp	Gln	Trp	Thr	Leu	Ser	Arg	Lys	Arg	Leu	Ser	Cys	Pro	Lys	Glu
		660					665						670		
Lys	Thr	Thr	Arg	Lys	Lys	Arg	Asn	Val	Asn	Phe	Gln	Lys	Ala	Ile	Asn
		675					680					685			
Glu	Lys	Leu	Gly	Gln	Tyr	Ala	Ser	Pro	Thr	Ala	Lys	Arg	Cys	Cys	Gln
	690					695					700				
Asp	Gly	Val	Thr	Arg	Leu	Pro	Met	Met	Arg	Ser	Cys	Glu	Gln	Arg	Ala
705					710				715						720
Ala	Arg	Val	Gln	Gln	Pro	Asp	Cys	Arg	Glu	Pro	Phe	Leu	Ser	Cys	Cys
				725					730					735	
Gln	Phe	Ala	Glu	Ser	Leu	Arg	Lys	Lys	Ser	Arg	Asp	Lys	Gly	Gln	Ala
		740					745						750		
Gly	Leu	Gln	Arg	Ala	Leu	Glu	Ile	Leu	Gln	Glu	Glu	Asp	Leu	Ile	Asp
		755					760					765			
Glu	Asp	Asp	Ile	Pro	Val	Arg	Ser	Phe	Phe	Pro	Glu	Asn	Trp	Leu	Trp
	770					775					780				
Arg	Val	Glu	Thr	Val	Asp	Arg	Phe	Gln	Ile	Leu	Thr	Leu	Trp	Leu	Pro
785					790				795						800
Asp	Ser	Leu	Thr	Thr	Trp	Glu	Ile	His	Gly	Leu	Ser	Leu	Ser	Lys	Thr
				805					810					815	
Lys	Gly	Leu	Cys	Val	Ala	Thr	Pro	Val	Gln	Leu	Arg	Val	Phe	Arg	Glu
			820					825					830		
Phe	His	Leu	His	Leu	Arg	Leu	Pro	Met	Ser	Val	Arg	Arg	Phe	Glu	Gln
		835					840					845			
Leu	Glu	Leu	Arg	Pro	Val	Leu	Tyr	Asn	Tyr	Leu	Asp	Lys	Asn	Leu	Thr
	850					855					860				
Val	Ser	Val	His	Val	Ser	Pro	Val	Glu	Gly	Leu	Cys	Leu	Ala	Gly	Gly
865					870				875						880
Gly	Gly	Leu	Ala	Gln	Val	Leu	Val	Pro	Ala	Gly	Ser	Ala	Arg	Pro	
				885					890					895	
Val	Ala	Phe	Ser	Val	Val	Pro	Thr	Ala	Ala	Ala	Ala	Val	Ser	Leu	Lys
			900					905					910		
Val	Val	Ala	Arg	Gly	Ser	Phe	Glu	Phe	Pro	Val	Gly	Asp	Ala	Val	Ser
		915					920					925			
Lys	Val	Leu	Gln	Ile	Glu	Lys	Glu	Gly	Ala	Ile	His	Arg	Glu	Glu	Leu
	930					935					940				
Val	Tyr	Glu	Leu	Asn	Pro	Leu	Asp	His	Arg	Gly	Arg	Thr	Leu	Glu	Ile
945					950					955					960

Pro Gly Asn Ser Asp Pro Asn Met Ile Pro Asp Gly Asp Phe Asn Ser
 965 970 975
 Tyr Val Arg Val Thr Ala Ser Asp Pro Leu Asp Thr Leu Gly Ser Glu
 980 985 990
 Gly Ala Leu Ser Pro Gly Gly Val Ala Ser Leu Leu Arg Leu Pro Arg
 995 1000 1005
 Gly Cys Gly Glu Gln Thr Met Ile Tyr Leu Ala Pro Thr Leu Ala
 1010 1015 1020
 Ala Ser Arg Tyr Leu Asp Lys Thr Glu Gln Trp Ser Thr Leu Pro
 1025 1030 1035
 Pro Glu Thr Lys Asp His Ala Val Asp Leu Ile Gln Lys Gly Tyr
 1040 1045 1050
 Met Arg Ile Gln Gln Phe Arg Lys Ala Asp Gly Ser Tyr Ala Ala
 1055 1060 1065
 Trp Leu Ser Arg Gly Ser Ser Thr Trp Leu Thr Ala Phe Val Leu
 1070 1075 1080
 Lys Val Leu Ser Leu Ala Gln Glu Gln Val Gly Gly Ser Pro Glu
 1085 1090 1095
 Lys Leu Gln Glu Thr Ser Asn Trp Leu Leu Ser Gln Gln Gln Ala
 1100 1105 1110
 Asp Gly Ser Phe Gln Asp Leu Ser Pro Val Ile His Arg Ser Met
 1115 1120 1125
 Gln Gly Gly Leu Val Gly Asn Asp Glu Thr Val Ala Leu Thr Ala
 1130 1135 1140
 Phe Val Thr Ile Ala Leu His His Gly Leu Ala Val Phe Gln Asp
 1145 1150 1155
 Glu Gly Ala Glu Pro Leu Lys Gln Arg Val Glu Ala Ser Ile Ser
 1160 1165 1170
 Lys Ala Ser Ser Phe Leu Gly Glu Lys Ala Ser Ala Gly Leu Leu
 1175 1180 1185
 Gly Ala His Ala Ala Ala Ile Thr Ala Tyr Ala Leu Thr Leu Thr
 1190 1195 1200
 Lys Ala Pro Ala Asp Leu Arg Gly Val Ala His Asn Asn Leu Met
 1205 1210 1215
 Ala Met Ala Gln Glu Thr Gly Asp Asn Leu Tyr Trp Gly Ser Val
 1220 1225 1230
 Thr Gly Ser Gln Ser Asn Ala Val Ser Pro Thr Pro Ala Pro Arg
 1235 1240 1245
 Asn Pro Ser Asp Pro Met Pro Gln Ala Pro Ala Leu Trp Ile Glu
 1250 1255 1260
 Thr Thr Ala Tyr Ala Leu Leu His Leu Leu Leu His Glu Gly Lys
 1265 1270 1275
 Ala Glu Met Ala Asp Gln Ala Ala Ala Trp Leu Thr Arg Gln Gly
 1280 1285 1290
 Ser Phe Gln Gly Gly Phe Arg Ser Thr Gln Asp Thr Val Ile Ala
 1295 1300 1305
 Leu Asp Ala Leu Ser Ala Tyr Trp Ile Ala Ser His Thr Thr Glu
 1310 1315 1320
 Glu Arg Gly Leu Asn Val Thr Leu Ser Ser Thr Gly Arg Asn Gly
 1325 1330 1335
 Phe Lys Ser His Ala Leu Gln Leu Asn Asn Arg Gln Ile Arg Gly
 1340 1345 1350
 Leu Glu Glu Glu Leu Gln Phe Ser Leu Gly Ser Lys Ile Asn Val
 1355 1360 1365
 Lys Val Gly Gly Asn Ser Lys Gly Thr Leu Lys Val Leu Arg Thr
 1370 1375 1380
 Tyr Asn Val Leu Asp Met Lys Asn Thr Thr Cys Gln Asp Leu Gln
 1385 1390 1395
 Ile Glu Val Thr Val Lys Gly His Val Glu Tyr Thr Met Glu Ala
 1400 1405 1410
 Asn Glu Asp Tyr Glu Asp Tyr Glu Tyr Asp Glu Leu Pro Ala Lys
 1415 1420 1425
 Asp Asp Pro Asp Ala Pro Leu Gln Pro Val Thr Pro Leu Gln Leu
 1430 1435 1440
 Phe Glu Gly Arg Arg Asn Arg Arg Arg Arg Glu Ala Pro Lys Val
 1445 1450 1455
 Val Glu Glu Gln Glu Ser Arg Val His Tyr Thr Val Cys Ile Trp
 1460 1465 1470
 Arg Asn Gly Lys Val Gly Leu Ser Gly Met Ala Ile Ala Asp Val

1475	Thr Leu Leu Ser Gly Phe	1480	His Ala Leu Arg Ala	1485	Asp Leu Glu Lys
1490	Leu Thr Ser Leu Ser Asp	1495	Arg Tyr Val Ser His	1500	Phe Glu Thr Glu
1505	Gly Pro His Val Leu Leu	1510	Phe Asp Ser Val	1515	Pro Thr Ser Arg
1520	Glu Cys Val Gly Phe Glu	1525	Ala Val Gln Glu Val	1530	Pro Val Gly Leu
1535	Val Gln Pro Ala Ser Ala	1540	Thr Leu Tyr Asp Tyr	1545	Tyr Asn Pro Glu
1550	Arg Arg Cys Ser Val Phe	1555	Tyr Gly Ala Pro Ser	1560	Lys Ser Arg Leu
1565	Leu Ala Thr Leu Cys Ser	1570	Ala Glu Val Cys Gln	1575	Cys Ala Glu Gly
1580	Lys Cys Pro Arg Gln Arg	1585	Ala Leu Glu Arg	1590	Gly Leu Gln Asp
1595	Glu Asp Gly Tyr Arg Met	1600	Lys Phe Ala Cys Tyr	1605	Tyr Pro Arg Val
1610	Glu Tyr Gly Phe Gln Val	1615	Lys Val Leu Arg Glu	1620	Asp Ser Arg Ala
1625	Ala Phe Arg Leu Phe Glu	1630	Thr Lys Ile Thr Gln	1635	Val Leu His Phe
1640	Thr Lys Asp Val Lys Ala	1645	Ala Ala Asn Gln Met	1650	Arg Asn Phe Leu
1655	Val Arg Ala Ser Cys Arg	1660	Leu Arg Leu Glu Pro	1665	Gly Lys Glu Tyr
1670	Leu Ile Met Gly Leu Asp	1675	Gly Ala Thr Tyr Asp	1680	Leu Glu Gly His
1685	Pro Gln Tyr Leu Leu Asp	1690	Ser Asn Ser Trp Ile	1695	Glu Glu Met Pro
1700	Ser Glu Arg Leu Cys Arg	1705	Ser Thr Arg Gln Arg	1710	Ala Ala Cys Ala
1715	Gln Leu Asn Asp Phe Leu	1720	Gln Glu Tyr Gly Thr	1725	Gln Gly Cys Gln
1730	Val	1735		1740	

<210> 233
 <211> 295
 <212> PRT
 <213> Homo sapiens
 <400> 233

Met Ile Glu Val Leu Thr Thr Thr	Asp Ser Gln Lys Leu Leu His Gln
1	5 10 15
Leu Asn Ala Leu Leu Glu Gln Glu	Ser Arg Cys Gln Pro Lys Val Cys
20	25 30
Gly Leu Arg Leu Ile Glu Ser Ala	His Asp Asn Gly Leu Arg Met Thr
35	40 45
Ala Arg Leu Arg Asp Phe Glu Val	Lys Asp Leu Leu Ser Leu Thr Gln
50	55 60
Phe Phe Gly Phe Asp Thr Glu Thr	Phe Ser Leu Ala Val Asn Leu Leu
65	70 75
Asp Arg Phe Leu Ser Lys Met Lys	Val Gln Pro Lys His Leu Gly Cys
85	90 95
Val Gly Leu Ser Cys Phe Tyr Leu	Ala Val Lys Ser Ile Glu Glu
100	105 110
Arg Asn Val Pro Leu Ala Thr Asp	Leu Ile Arg Ile Ser Gln Tyr Arg
115	120 125
Phe Thr Val Ser Asp Leu Met Arg	Met Glu Lys Ile Val Leu Glu Lys
130	135 140
Val Cys Trp Lys Val Lys Ala Thr	Thr Ala Phe Gln Phe Leu Gln Leu
145	150 155
Tyr Tyr Ser Leu Leu Gln Glu Asn	Leu Pro Leu Glu Arg Arg Asn Ser
165	170 175
Ile Asn Phe Glu Arg Leu Glu Ala	Gln Leu Lys Ala Cys His Cys Arg
180	185 190
Ile Ile Phe Ser Lys Ala Lys Pro	Ser Val Leu Ala Leu Ser Ile Ile
195	200 205

Ala Leu Glu Ile Gln Ala Gln Lys Cys Val Glu Leu Thr Glu Gly Ile
 210 215 220
 Glu Cys Leu Gln Lys His Ser Lys Ile Asn Gly Arg Asp Leu Thr Phe
 225 230 235 240
 Trp Gln Glu Leu Val Ser Lys Cys Leu Thr Glu Tyr Ser Ser Asn Lys
 245 250 255
 Cys Ser Lys Pro Asn Val Gln Lys Leu Lys Trp Ile Val Ser Gly Arg
 260 265 270
 Thr Ala Arg Gln Leu Lys His Ser Tyr Tyr Arg Ile Thr His Leu Pro
 275 280 285
 Thr Ile Pro Glu Met Val Pro
 290 295

<210> 234
 <211> 359
 <212> PRT
 <213> Homo sapiens
 <400> 234

Met Ala Ala Val Ser Gly Leu Val Arg Arg Pro Leu Arg Glu Val Ser
 1 5 10 15
 Gly Leu Leu Lys Arg Arg Phe His Trp Thr Ala Pro Ala Ala Leu Gln
 20 25 30
 Val Thr Val Arg Asp Ala Ile Asn Gln Gly Met Asp Glu Leu Glu
 35 40 45
 Arg Asp Glu Lys Val Phe Leu Leu Gly Glu Glu Val Ala Gln Tyr Asp
 50 55 60
 Gly Ala Tyr Lys Val Ser Arg Gly Leu Trp Lys Lys Tyr Gly Asp Lys
 65 70 75 80
 Arg Ile Ile Asp Thr Pro Ile Ser Glu Met Gly Phe Ala Gly Ile Ala
 85 90 95
 Val Gly Ala Ala Met Ala Gly Leu Arg Pro Ile Cys Glu Phe Met Thr
 100 105 110
 Phe Asn Phe Ser Met Gln Ala Ile Asp Gln Val Ile Asn Ser Ala Ala
 115 120 125
 Lys Thr Tyr Tyr Met Ser Gly Gly Leu Gln Pro Val Pro Ile Val Phe
 130 135 140
 Arg Gly Pro Asn Gly Ala Ser Ala Gly Val Ala Ala Gln His Ser Gln
 145 150 155 160
 Cys Phe Ala Ala Trp Tyr Gly His Cys Pro Gly Leu Lys Val Val Ser
 165 170 175
 Pro Trp Asn Ser Glu Asp Ala Lys Gly Leu Ile Lys Ser Ala Ile Arg
 180 185 190
 Asp Asn Asn Pro Val Val Val Leu Glu Asn Glu Leu Met Tyr Gly Val
 195 200 205
 Pro Phe Glu Phe Leu Pro Glu Ala Gln Ser Lys Asp Phe Leu Ile Pro
 210 215 220
 Ile Gly Lys Ala Lys Ile Glu Arg Gln Gly Thr His Ile Thr Val Val
 225 230 235 240
 Ser His Ser Arg Pro Val Gly His Cys Leu Glu Ala Ala Ala Val Leu
 245 250 255
 Ser Lys Glu Gly Val Glu Cys Glu Val Ile Asn Met Arg Thr Ile Arg
 260 265 270
 Pro Met Asp Met Glu Thr Ile Glu Ala Ser Val Met Lys Thr Asn His
 275 280 285
 Leu Val Thr Val Glu Gly Gly Trp Pro Gln Phe Gly Val Gly Ala Glu
 290 295 300
 Ile Cys Ala Arg Ile Met Glu Gly Pro Ala Phe Asn Phe Leu Asp Ala
 305 310 315 320
 Pro Ala Val Arg Val Thr Gly Ala Asp Val Pro Met Pro Tyr Ala Lys
 325 330 335
 Ile Leu Glu Asp Asn Ser Ile Pro Gln Val Lys Asp Ile Ile Phe Ala
 340 345 350
 Ile Lys Lys Thr Leu Asn Ile
 355

<210> 235
 <211> 420
 <212> PRT
 <213> Homo sapiens

<400> 235
 Met Glu Val Pro Pro Arg Leu Ser His Val Pro Pro Pro Leu Phe Pro
 1 5 10 15
 Ser Ala Pro Ala Thr Leu Ala Ser Arg Ser Leu Ser His Trp Arg Pro
 20 25 30
 Arg Pro Pro Arg Gln Leu Ala Pro Leu Leu Pro Ser Leu Ala Pro Ser
 35 40 45
 Ser Ala Arg Gln Gly Ala Arg Arg Ala Gln Arg His Val Thr Ala Gln
 50 55 60
 Gln Pro Ser Arg Leu Ala Gly Gly Ala Ala Ile Lys Gly Gly Arg Arg
 65 70 75 80
 Arg Arg Pro Asp Leu Phe Arg Arg His Phe Lys Ser Ser Ser Ile Gln
 85 90 95
 Arg Ser Ala Ala Ala Ala Ala Ala Thr Arg Thr Ala Arg Gln His Pro
 100 105 110
 Pro Ala Asp Ser Ser Val Thr Met Glu Asp Met Asn Glu Tyr Ser Asn
 115 120 125
 Ile Glu Glu Phe Ala Glu Gly Ser Lys Ile Asn Ala Ser Lys Asn Gln
 130 135 140
 Gln Asp Asp Gly Lys Met Phe Ile Gly Gly Leu Ser Trp Asp Thr Ser
 145 150 155 160
 Lys Lys Asp Leu Thr Glu Tyr Leu Ser Arg Phe Gly Glu Val Val Asp
 165 170 175
 Cys Thr Ile Lys Thr Asp Pro Val Thr Gly Arg Ser Arg Gly Phe Gly
 180 185 190
 Phe Val Leu Phe Lys Asp Ala Ala Ser Val Asp Lys Val Leu Glu Leu
 195 200 205
 Lys Glu His Lys Leu Asp Gly Lys Leu Ile Asp Pro Lys Arg Ala Lys
 210 215 220
 Ala Leu Lys Gly Lys Glu Pro Pro Lys Lys Val Phe Val Gly Gly Leu
 225 230 235 240
 Ser Pro Asp Thr Ser Glu Glu Gln Ile Lys Glu Tyr Phe Gly Ala Phe
 245 250 255
 Gly Glu Ile Glu Asn Ile Glu Leu Pro Met Asp Thr Lys Thr Asn Glu
 260 265 270
 Arg Arg Gly Phe Cys Phe Ile Thr Tyr Thr Asp Glu Glu Pro Val Lys
 275 280 285
 Lys Leu Leu Glu Ser Arg Tyr His Gln Ile Gly Ser Gly Lys Cys Glu
 290 295 300
 Ile Lys Val Ala Gln Pro Lys Glu Val Tyr Arg Gln Gln Gln Gln Gln
 305 310 315 320
 Gln Lys Gly Gly Arg Gly Ala Ala Ala Gly Arg Gly Gly Thr Arg
 325 330 335
 Gly Arg Gly Arg Gly Gln Gly Gln Asn Trp Asn Gln Gly Phe Asn Asn
 340 345 350
 Tyr Tyr Asp Gln Gly Tyr Gly Asn Tyr Asn Ser Ala Tyr Gly Gly Asp
 355 360 365
 Gln Asn Tyr Ser Gly Tyr Gly Gly Tyr Asp Tyr Thr Gly Tyr Asn Tyr
 370 375 380
 Gly Asn Tyr Gly Tyr Gly Gln Gly Tyr Ala Asp Tyr Ser Gly Gln Gln
 385 390 395 400
 Ser Thr Tyr Gly Lys Ala Ser Arg Gly Gly Gly Asn His Gln Asn Asn
 405 410 415
 Tyr Gln Pro Tyr
 420

<210> 236
 <211> 211
 <212> PRT
 <213> Homo sapiens
 <400> 236

Met Asp Asp Ala His Glu Ser Pro Ser Asp Lys Gly Gly Glu Thr Gly
 1 5 10 15
 Glu Ser Asp Glu Thr Ala Ala Val Pro Gly Asp Pro Gly Ala Thr Asp
 20 25 30
 Thr Asp Gly Ile Pro Glu Glu Thr Asp Gly Asp Ala Asp Val Asp Leu
 35 40 45
 Lys Glu Ala Ala Ala Glu Glu Gly Glu Leu Glu Ser Gln Asp Val Ser
 50 55 60

Asp Leu Thr Thr Val Glu Arg Glu Asp Ser Ser Leu Leu Asn Pro Ala
 65 70 75 80
 Ala Lys Lys Leu Lys Ile Asp Thr Lys Glu Lys Lys Glu Lys Lys Gln
 85 90 95
 Lys Val Asp Glu Asp Glu Ile Gln Lys Met Gln Ile Leu Val Ser Ser
 100 105 110
 Phe Ser Glu Glu Gln Leu Asn Arg Tyr Glu Met Tyr Arg Ser Ala
 115 120 125
 Phe Pro Lys Ala Ala Ile Lys Arg Leu Ile Gln Ser Ile Thr Gly Thr
 130 135 140
 Ser Val Ser Gln Asn Val Val Ile Ala Met Ser Gly Ile Ser Lys Val
 145 150 155 160
 Phe Val Gly Glu Val Val Glu Glu Ala Leu Asp Val Cys Glu Lys Trp
 165 170 175
 Gly Glu Met Pro Pro Leu Gln Pro Lys His Met Arg Glu Ala Val Arg
 180 185 190
 Arg Leu Lys Ser Lys Gly Gln Ile Pro Asn Ser Lys His Lys Lys Ile
 195 200 205
 Ile Phe Phe
 210

<210> 237
 <211> 382
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <222> (19)..(19)
 <223> X = A, C, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, T, V, W, or Y
 <400> 237

Met Ala Leu Gln Gly Ile Ser Val Val Glu Leu Ser Gly Leu Ala Pro
 1 5 10 15
 Gly Arg Xaa Cys Ala Met Val Leu Ala Asp Phe Gly Ala Arg Val Val
 20 25 30
 Arg Val Asp Arg Pro Gly Ser Arg Tyr Asp Val Ser Arg Leu Gly Arg
 35 40 45
 Gly Lys Arg Ser Leu Val Leu Asp Leu Lys Gln Pro Arg Glu Pro Arg
 50 55 60
 Ala Ala Ala Ser Val Gln Ala Val Gly Cys Ala Ala Gly Ala Leu Pro
 65 70 75 80
 Pro Arg Cys His Gly Glu Thr Pro Ala Gly Pro Arg Asp Ser Ala Ala
 85 90 95
 Gly Lys Ser Lys Ala Tyr Leu Cys Gln Ala Glu Trp Ile Trp Pro Val
 100 105 110
 Gln Glu Ser Phe Cys Arg Leu Ala Gly His Asp Ile Asn Tyr Leu Ala
 115 120 125
 Leu Ser Gly Val Leu Ser Lys Ile Gly Arg Ser Gly Glu Asn Pro Tyr
 130 135 140
 Ala Pro Leu Asn Leu Val Ala Asp Phe Ala Gly Gly Gly Leu Met Cys
 145 150 155 160
 Ala Leu Gly Ile Ile Met Ala Leu Phe Asp Arg Thr Arg Thr Asp Lys
 165 170 175
 Gly Gln Val Ile Asp Ala Asn Met Val Glu Gly Thr Ala Tyr Leu Ser
 180 185 190
 Ser Phe Leu Trp Lys Thr Gln Lys Ser Ser Leu Trp Glu Ala Pro Arg
 195 200 205
 Gly Gln Asn Met Leu Asp Gly Gly Ala Pro Phe Tyr Thr Thr Tyr Arg
 210 215 220
 Thr Ala Asp Gly Glu Phe Met Ala Val Gly Ala Ile Glu Pro Gln Phe
 225 230 235 240
 Tyr Glu Leu Leu Ile Lys Gly Leu Gly Leu Lys Ser Asp Glu Leu Pro
 245 250 255
 Asn Gln Met Ser Thr Asp Asp Trp Pro Glu Met Lys Lys Lys Phe Ala
 260 265 270
 Asp Val Phe Ala Lys Lys Thr Lys Ala Glu Trp Cys Gln Ile Phe Asp
 275 280 285
 Gly Thr Asp Ala Cys Val Thr Pro Val Leu Thr Phe Glu Glu Val Val
 290 295 300
 His His Asp His Asn Lys Glu Arg Gly Ser Phe Ile Thr Ser Glu Glu

305 310 315 320
 Gln Asp Val Ser Pro Arg Leu Ala Pro Leu Leu Leu Asn Thr Pro Ala
 325 330 335
 Ile Pro Ser Ser Lys Gly Asp Pro Phe Ile Gly Glu His Thr Glu Glu
 340 345 350
 Ile Leu Glu Glu Phe Gly Phe Ser Arg Glu Glu Ile Tyr Gln Leu Asn
 355 360 365
 Ser Asp Lys Ile Ile Glu Ser Asn Lys Val Lys Ala Ser Leu
 370 375 380

<210> 238
 <211> 254
 <212> PRT
 <213> Homo sapiens
 <400> 238

Met Asp Asn Tyr Ala Asp Leu Ser Asp Thr Glu Leu Thr Thr Leu Leu
 1 5 10 15
 Arg Arg Tyr Asn Ile Pro His Gly Pro Val Val Gly Ser Thr Arg Arg
 20 25 30
 Leu Tyr Glu Lys Lys Ile Phe Glu Tyr Glu Thr Gln Arg Arg Leu
 35 40 45
 Ser Pro Pro Ser Ser Ser Ala Ala Ser Ser Tyr Ser Phe Ser Asp Leu
 50 55 60
 Asn Ser Thr Arg Gly Asp Ala Asp Met Tyr Asp Leu Pro Lys Lys Glu
 65 70 75 80
 Asp Ala Leu Leu Tyr Gln Ser Lys Gly Tyr Asn Asp Asp Tyr Tyr Glu
 85 90 95
 Glu Ser Tyr Phe Thr Thr Arg Thr Tyr Gly Glu Pro Glu Ser Ala Gly
 100 105 110
 Pro Ser Arg Ala Val Arg Gln Ser Val Thr Ser Phe Pro Asp Ala Asp
 115 120 125
 Ala Phe His His Gln Val His Asp Asp Asp Leu Leu Ser Ser Ser Glu
 130 135 140
 Glu Glu Cys Lys Asp Arg Glu Arg Pro Met Tyr Gly Arg Asp Ser Ala
 145 150 155 160
 Tyr Gln Ser Ile Thr His Tyr Arg Pro Val Ser Ala Ser Arg Ser Ser
 165 170 175
 Leu Asp Leu Ser Tyr Tyr Pro Thr Ser Ser Ser Thr Ser Phe Met Ser
 180 185 190
 Ser Ser Ser Ser Ser Ser Ser Trp Leu Thr Arg Arg Ala Ile Arg Pro
 195 200 205
 Glu Asn Arg Ala Pro Gly Ala Gly Leu Gly Gln Asp Arg Gln Val Pro
 210 215 220
 Leu Trp Gly Gln Leu Leu Phe Leu Val Phe Val Ile Val Leu Phe
 225 230 235 240
 Phe Ile Tyr His Phe Met Gln Ala Glu Glu Gly Asn Pro Phe
 245 250

<210> 239
 <211> 423
 <212> PRT
 <213> Homo sapiens
 <400> 239

Met Ala Met Val Val Ser Ser Trp Arg Asp Pro Gln Asp Asp Val Ala
 1 5 10 15
 Gly Gly Asn Pro Gly Gly Pro Asn Pro Ala Ala Gln Ala Ala Arg Gly
 20 25 30
 Gly Gly Gly Gly Ala Gly Glu Gln Gln Gln Ala Gly Ser Gly Ala
 35 40 45
 Pro His Thr Pro Gln Thr Pro Gly Gln Pro Gly Ala Pro Ala Thr Pro
 50 55 60
 Gly Thr Ala Gly Asp Lys Gly Gln Gly Pro Pro Gly Ser Gly Gln Ser
 65 70 75 80
 Gln Gln His Ile Glu Cys Val Val Cys Gly Asp Lys Ser Ser Gly Lys
 85 90 95
 His Tyr Gly Gln Phe Thr Cys Glu Gly Cys Lys Ser Phe Phe Lys Arg
 100 105 110
 Ser Val Arg Arg Asn Leu Thr Tyr Thr Cys Arg Ala Asn Arg Asn Cys
 115 120 125

Pro Ile Asp Gln His His Arg Asn Gln Cys Gln Tyr Cys Arg Leu Lys
 130 135 140
 Lys Cys Leu Lys Val Gly Met Arg Arg Glu Ala Val Gln Arg Gly Arg
 145 150 155 160
 Met Pro Pro Thr Gln Pro Asn Pro Gly Gln Tyr Ala Leu Thr Asn Gly
 165 170 175
 Asp Pro Leu Asn Gly His Cys Tyr Leu Ser Gly Tyr Ile Ser Leu Leu
 180 185 190
 Leu Arg Ala Glu Pro Tyr Pro Thr Ser Arg Tyr Gly Ser Gln Cys Met
 195 200 205
 Gln Pro Asn Asn Ile Met Gly Ile Glu Asn Ile Cys Glu Leu Ala Ala
 210 215 220
 Arg Leu Leu Phe Ser Ala Val Glu Trp Ala Arg Asn Ile Pro Phe Phe
 225 230 235 240
 Pro Asp Leu Gln Ile Thr Asp Gln Val Ser Leu Leu Arg Leu Thr Trp
 245 250 255
 Ser Glu Leu Phe Val Leu Asn Ala Ala Gln Cys Ser Met Pro Leu His
 260 265 270
 Val Ala Pro Leu Leu Ala Ala Ala Gly Leu His Ala Ser Pro Met Ser
 275 280 285
 Ala Asp Arg Val Val Ala Phe Met Asp His Ile Arg Ile Phe Gln Glu
 290 295 300
 Gln Val Glu Lys Leu Lys Ala Leu His Val Asp Ser Ala Glu Tyr Ser
 305 310 315 320
 Cys Leu Lys Ala Ile Val Leu Phe Thr Ser Asp Ala Cys Gly Leu Ser
 325 330 335
 Asp Ala Ala His Ile Glu Ser Leu Gln Glu Lys Ser Gln Cys Ala Leu
 340 345 350
 Glu Glu Tyr Val Arg Ser Gln Tyr Pro Asn Gln Pro Ser Arg Phe Gly
 355 360 365
 Lys Leu Leu Leu Arg Leu Pro Ser Leu Arg Thr Val Ser Ser Ser Val
 370 375 380
 Ile Glu Gln Leu Phe Phe Val Arg Leu Val Gly Lys Thr Pro Ile Glu
 385 390 395 400
 Thr Leu Ile Arg Asp Met Leu Leu Ser Gly Ser Ser Phe Asn Trp Pro
 405 410 415
 Tyr Met Ser Ile Gln Cys Ser
 420

<210> 240
 <211> 536
 <212> PRT
 <213> Homo sapiens
 <400> 240

Met Lys Gln Ser Ser Asn Val Pro Ala Phe Leu Ser Lys Leu Trp Thr
 1 5 10 15
 Leu Val Glu Glu Thr His Thr Asn Glu Phe Ile Thr Trp Ser Gln Asn
 20 25 30
 Gly Gln Ser Phe Leu Val Leu Asp Glu Gln Arg Phe Ala Lys Glu Ile
 35 40 45
 Leu Pro Lys Tyr Phe Lys His Asn Asn Met Ala Ser Phe Val Arg Gln
 50 55 60
 Leu Asn Met Tyr Gly Phe Arg Lys Val Val His Ile Asp Ser Gly Ile
 65 70 75 80
 Val Lys Gln Glu Arg Asp Gly Pro Val Glu Phe Gln His Pro Tyr Phe
 85 90 95
 Lys Gln Gly Gln Asp Asp Leu Leu Glu Asn Ile Lys Arg Lys Val Ser
 100 105 110
 Ser Ser Lys Pro Glu Glu Asn Lys Ile Arg Gln Glu Asp Leu Thr Lys
 115 120 125
 Ile Ile Ser Ser Ala Gln Lys Val Gln Ile Lys Gln Glu Thr Ile Glu
 130 135 140
 Ser Arg Leu Ser Glu Leu Lys Ser Glu Asn Glu Ser Leu Trp Lys Glu
 145 150 155 160
 Val Ser Glu Leu Arg Ala Lys His Ala Gln Gln Gln Val Ile Arg
 165 170 175
 Lys Ile Val Gln Phe Ile Val Thr Leu Val Gln Asn Asn Gln Leu Val
 180 185 190
 Ser Leu Lys Arg Lys Arg Pro Leu Leu Leu Asn Thr Asn Gly Ala Gln

195
 Lys Lys Asn Leu Phe Gln His Ile Val Lys Glu Pro Thr Asp Asn His
 210 215 220
 His His Lys Val Pro His Ser Arg Thr Glu Gly Leu Lys Pro Arg Glu
 225 230 235 240
 Arg Ile Ser Asp Asp Ile Ile Ile Tyr Asp Val Thr Asp Asp Asn Ala
 245 250 255
 Asp Glu Glu Asn Ile Pro Val Ile Pro Glu Thr Asn Glu Asp Val Ile
 260 265 270
 Ser Asp Pro Ser Asn Cys Ser Gln Tyr Pro Asp Ile Val Ile Val Glu
 275 280 285
 Asp Asp Asn Glu Asp Glu Tyr Ala Pro Val Ile Gln Ser Gly Glu Gln
 290 295 300
 Asn Glu Pro Ala Arg Glu Ser Leu Ser Ser Gly Ser Asp Gly Ser Ser
 305 310 315 320
 Pro Leu Met Ser Ser Ala Val Gln Leu Asn Gly Ser Ser Ser Leu Thr
 325 330 335
 Ser Glu Asp Pro Val Thr Met Met Asp Ser Ile Leu Asn Asp Asn Ile
 340 345 350
 Asn Leu Leu Gly Lys Val Glu Leu Asp Tyr Leu Asp Ser Ile Asp
 355 360 365
 Cys Ser Leu Glu Asp Phe Gln Ala Met Leu Ser Gly Arg Gln Phe Ser
 370 375 380
 Ile Asp Pro Asp Leu Leu Val Asp Leu Phe Thr Ser Ser Val Gln Met
 385 390 395 400
 Asn Pro Thr Asp Tyr Ile Asn Asn Thr Lys Ser Glu Asn Lys Gly Leu
 405 410 415
 Glu Thr Thr Lys Asn Asn Val Val Gln Pro Val Ser Glu Glu Gly Arg
 420 425 430
 Lys Ser Lys Ser Lys Pro Asp Lys Gln Leu Ile Gln Tyr Thr Ala Phe
 435 440 445
 Pro Leu Leu Ala Phe Leu Asp Gly Asn Pro Ala Ser Ser Val Glu Gln
 450 455 460
 Ala Ser Thr Thr Ala Ser Ser Glu Val Leu Ser Ser Val Asp Lys Pro
 465 470 475 480
 Ile Glu Val Asp Glu Leu Leu Asp Ser Ser Leu Asp Pro Glu Pro Thr
 485 490 495
 Gln Ser Lys Leu Val Arg Leu Glu Pro Leu Thr Glu Ala Glu Ala Ser
 500 505 510
 Glu Ala Thr Leu Phe Tyr Leu Cys Glu Leu Ala Pro Ala Pro Leu Asp
 515 520 525
 Ser Asp Met Pro Leu Leu Asp Ser
 530 535

<210> 241
 <211> 616
 <212> PRT
 <213> Homo sapiens
 <400> 241

Met Asn Ser Pro Gly Gly Arg Gly Lys Lys Lys Gly Ser Gly Gly Ala
 1 5 10 15
 Ser Asn Pro Val Pro Pro Arg Pro Pro Pro Pro Cys Leu Ala Pro Ala
 20 25 30
 Pro Pro Ala Ala Gly Pro Ala Pro Pro Glu Ser Pro His Lys Arg
 35 40 45
 Asn Leu Tyr Tyr Phe Ser Tyr Pro Leu Phe Val Gly Phe Ala Leu Leu
 50 55 60
 Arg Leu Val Ala Phe His Leu Gly Leu Leu Phe Val Trp Leu Cys Gln
 65 70 75 80
 Arg Phe Ser Arg Ala Leu Met Ala Ala Lys Arg Ser Ser Gly Ala Ala
 85 90 95
 Pro Ala Pro Ala Ser Ala Ser Ala Pro Ala Pro Val Pro Gly Gly Glu
 100 105 110
 Ala Glu Arg Val Arg Val Phe His Lys Gln Ala Phe Glu Tyr Ile Ser
 115 120 125
 Ile Ala Leu Arg Ile Asp Glu Asp Glu Lys Ala Gly Gln Lys Glu Gln
 130 135 140
 Ala Val Glu Trp Tyr Lys Lys Gly Ile Glu Glu Leu Glu Lys Gly Ile
 145 150 155 160

Ala Val Ile Val Thr Gly Gln Gly Glu Gln Cys Glu Arg Ala Arg Arg
 165 170 175
 Leu Gln Ala Lys Met Met Thr Asn Leu Val Met Ala Lys Asp Arg Leu
 180 185 190
 Gln Leu Leu Glu Lys Met Gln Pro Val Leu Pro Phe Ser Lys Ser Gln
 195 200 205
 Thr Asp Val Tyr Asn Asp Ser Thr Asn Leu Ala Cys Arg Asn Gly His
 210 215 220
 Leu Gln Ser Glu Ser Gly Ala Val Pro Lys Arg Lys Asp Pro Leu Thr
 225 230 235 240
 His Thr Ser Asn Ser Leu Pro Arg Ser Lys Thr Val Met Lys Thr Gly
 245 250 255
 Ser Ala Gly Leu Ser Gly His His Arg Ala Pro Ser Tyr Ser Gly Leu
 260 265 270
 Ser Met Val Ser Gly Val Lys Gln Gly Ser Gly Pro Ala Pro Thr Thr
 275 280 285
 His Lys Gly Thr Pro Lys Thr Asn Arg Thr Asn Lys Pro Ser Thr Pro
 290 295 300
 Thr Thr Ala Thr Arg Lys Lys Lys Asp Leu Lys Asn Phe Arg Asn Val
 305 310 315 320
 Asp Ser Asn Leu Ala Asn Leu Ile Met Asn Glu Ile Val Asp Asn Gly
 325 330 335
 Thr Ala Val Lys Phe Asp Asp Ile Ala Gly Gln Asp Leu Ala Lys Gln
 340 345 350
 Ala Leu Gln Glu Ile Val Ile Leu Pro Ser Leu Arg Pro Glu Leu Phe
 355 360 365
 Thr Gly Leu Arg Ala Pro Ala Arg Gly Leu Leu Leu Phe Gly Pro Pro
 370 375 380
 Gly Asn Gly Lys Thr Met Leu Ala Lys Ala Val Ala Ala Glu Ser Asn
 385 390 395 400
 Ala Thr Phe Phe Asn Ile Ser Ala Ala Ser Leu Thr Ser Lys Tyr Val
 405 410 415
 Gly Glu Gly Glu Lys Leu Val Arg Ala Leu Phe Ala Val Ala Arg Glu
 420 425 430
 Leu Gln Pro Ser Ile Ile Phe Ile Asp Glu Val Asp Ser Leu Leu Cys
 435 440 445
 Glu Arg Arg Glu Gly Glu His Asp Ala Ser Arg Arg Leu Lys Thr Glu
 450 455 460
 Phe Leu Ile Glu Phe Asp Gly Val Gln Ser Ala Gly Asp Asp Arg Val
 465 470 475 480
 Leu Val Met Gly Ala Thr Asn Arg Pro Gln Glu Leu Asp Glu Ala Val
 485 490 495
 Leu Arg Arg Phe Ile Lys Arg Val Tyr Val Ser Leu Pro Asn Glu Glu
 500 505 510
 Thr Arg Leu Leu Leu Leu Lys Asn Leu Leu Cys Lys Gln Gly Ser Pro
 515 520 525
 Leu Thr Gln Lys Glu Leu Ala Gln Leu Ala Arg Met Thr Asp Gly Tyr
 530 535 540
 Ser Gly Ser Asp Leu Thr Ala Leu Ala Lys Asp Ala Ala Leu Gly Pro
 545 550 555 560
 Ile Arg Glu Leu Lys Pro Glu Gln Val Lys Asn Met Ser Ala Ser Glu
 565 570 575
 Met Arg Asn Ile Arg Leu Ser Asp Phe Thr Glu Ser Leu Lys Lys Ile
 580 585 590
 Lys Arg Ser Val Ser Pro Gln Thr Leu Glu Ala Tyr Ile Arg Trp Asn
 595 600 605
 Lys Asp Phe Gly Asp Thr Thr Val
 610 615

<210> 242

<211> 1979

<212> PRT

<213> Homo sapiens

<400> 242

Met Ser Ser Trp Leu Gly Gly Leu Gly Ser Gly Leu Gly Gln Ser Leu
 1 5 10 15
 Gly Gln Val Gly Gly Ser Leu Ala Ser Leu Thr Gly Gln Ile Ser Asn
 20 25 30
 Phe Thr Lys Asp Met Leu Met Glu Gly Thr Glu Glu Val Glu Ala Glu

35 40 45
 Leu Pro Asp Ser Arg Thr Lys Glu Ile Glu Ala Ile His Ala Ile Leu
 50 55 60
 Arg Ser Glu Asn Glu Arg Leu Lys Lys Leu Cys Thr Asp Leu Glu Glu
 65 70 75 80
 Lys His Glu Ala Ser Glu Ile Gln Ile Lys Gln Gln Ser Thr Ser Tyr
 85 90 95
 Arg Asn Gln Leu Gln Gln Lys Glu Val Glu Ile Ser His Leu Lys Ala
 100 105 110
 Arg Gln Ile Ala Leu Gln Asp Gln Leu Leu Lys Leu Gln Ser Ala Ala
 115 120 125
 Gln Ser Val Pro Ser Gly Ala Gly Val Pro Ala Thr Thr Ala Ser Ser
 130 135 140
 Ser Phe Ala Tyr Gly Ile Ser His His Pro Ser Ala Phe His Asp Asp
 145 150 155 160
 Asp Met Asp Phe Gly Asp Ile Ile Ser Ser Gln Gln Glu Ile Asn Arg
 165 170 175
 Leu Ser Asn Glu Val Ser Arg Leu Glu Ser Glu Val Gly His Trp Arg
 180 185 190
 His Ile Ala Gln Thr Ser Lys Ala Gln Gly Thr Asp Asn Ser Asp Gln
 195 200 205
 Ser Glu Ile Cys Lys Leu Gln Asn Ile Ile Lys Glu Leu Lys Gln Asn
 210 215 220
 Arg Ser Gln Glu Ile Asp Asp His Gln His Glu Met Ser Val Leu Gln
 225 230 235 240
 Asn Ala His Gln Gln Lys Leu Thr Glu Ile Ser Arg Arg His Arg Glu
 245 250 255
 Glu Leu Ser Asp Tyr Glu Glu Arg Ile Glu Glu Leu Glu Asn Leu Leu
 260 265 270
 Gln Gln Gly Gly Ser Gly Val Ile Glu Thr Asp Leu Ser Lys Ile Tyr
 275 280 285
 Glu Met Gln Lys Thr Ile Gln Val Leu Gln Ile Glu Lys Val Glu Ser
 290 295 300
 Thr Lys Lys Met Glu Gln Leu Glu Asp Lys Ile Lys Asp Ile Asn Lys
 305 310 315 320
 Lys Leu Ser Ser Ala Glu Asn Asp Arg Asp Ile Leu Arg Arg Glu Gln
 325 330 335
 Glu Gln Leu Asn Val Glu Lys Arg Gln Ile Met Glu Glu Cys Glu Asn
 340 345 350
 Leu Lys Leu Glu Cys Ser Lys Leu Gln Pro Ser Ala Val Lys Gln Ser
 355 360 365
 Asp Thr Met Thr Glu Lys Glu Arg Ile Leu Ala Gln Ser Ala Ser Val
 370 375 380
 Glu Glu Val Phe Arg Leu Gln Gln Ala Leu Ser Asp Ala Glu Asn Glu
 385 390 395 400
 Ile Met Arg Leu Ser Ser Leu Asn Gln Asp Asn Ser Leu Ala Glu Asp
 405 410 415
 Asn Leu Lys Leu Lys Met Arg Ile Glu Val Leu Glu Lys Glu Lys Ser
 420 425 430
 Leu Leu Ser Gln Glu Lys Glu Glu Leu Gln Met Ser Leu Leu Lys Leu
 435 440 445
 Asn Asn Glu Tyr Glu Val Ile Lys Ser Thr Ala Thr Arg Asp Ile Ser
 450 455 460
 Leu Asp Ser Glu Leu His Asp Leu Arg Leu Asn Leu Glu Ala Lys Glu
 465 470 475 480
 Gln Glu Leu Asn Gln Ser Ile Ser Glu Lys Glu Thr Leu Ile Ala Glu
 485 490 495
 Ile Glu Glu Leu Asp Arg Gln Asn Gln Glu Ala Thr Lys His Met Ile
 500 505 510
 Leu Ile Lys Asp Gln Leu Ser Lys Gln Gln Asn Glu Gly Asp Ser Ile
 515 520 525
 Ile Ser Lys Leu Lys Gln Asp Leu Asn Asp Glu Lys Lys Arg Val His
 530 535 540
 Gln Leu Glu Asp Asp Lys Met Asp Ile Thr Lys Glu Leu Asp Val Gln
 545 550 555 560
 Lys Glu Lys Leu Ile Gln Ser Glu Val Ala Leu Asn Asp Leu His Leu
 565 570 575
 Thr Lys Gln Lys Leu Glu Asp Lys Val Glu Asn Leu Val Asp Gln Leu
 580 585 590

Asn Lys Ser Gln Glu Ser Asn Val Ser Ile Gln Lys Glu Asn Leu Glu
 595 600 605
 Leu Lys Glu His Ile Arg Gln Asn Glu Glu Glu Leu Ser Arg Ile Arg
 610 615 620
 Asn Glu Leu Met Gln Ser Leu Asn Gln Asp Ser Asn Ser Asn Phe Lys
 625 630 635 640
 Asp Thr Leu Leu Lys Glu Arg Glu Ala Glu Val Arg Asn Leu Lys Gln
 645 650 655
 Asn Leu Ser Glu Leu Glu Gln Leu Asn Glu Asn Leu Lys Lys Val Ala
 660 665 670
 Phe Asp Val Lys Met Glu Asn Glu Lys Leu Val Leu Ala Cys Glu Asp
 675 680 685
 Val Arg His Gln Leu Glu Glu Cys Leu Ala Gly Asn Asn Gln Leu Ser
 690 695 700
 Leu Glu Lys Asn Thr Ile Val Glu Thr Leu Lys Met Glu Lys Gly Glu
 705 710 715 720
 Ile Glu Ala Glu Leu Cys Trp Ala Lys Lys Arg Leu Leu Glu Glu Ala
 725 730 735
 Asn Lys Tyr Glu Lys Thr Ile Glu Glu Leu Ser Asn Ala Arg Asn Leu
 740 745 750
 Asn Thr Ser Ala Leu Gln Leu Glu His Glu His Leu Ile Lys Leu Asn
 755 760 765
 Gln Lys Lys Asp Met Glu Ile Ala Glu Leu Lys Lys Asn Ile Glu Gln
 770 775 780
 Met Asp Thr Asp His Lys Glu Thr Lys Asp Val Leu Ser Ser Ser Leu
 785 790 795 800
 Glu Glu Gln Lys Gln Leu Thr Gln Leu Ile Asn Lys Lys Glu Ile Phe
 805 810 815
 Ile Glu Lys Leu Lys Glu Arg Ser Ser Lys Leu Gln Glu Glu Leu Asp
 820 825 830
 Lys Tyr Ser Gln Ala Leu Arg Lys Asn Glu Ile Leu Arg Gln Thr Ile
 835 840 845
 Glu Glu Lys Asp Arg Ser Leu Gly Ser Met Lys Glu Glu Asn Asn His
 850 855 860
 Leu Gln Glu Glu Leu Glu Arg Leu Arg Glu Glu Gln Ser Arg Thr Ala
 865 870 875 880
 Pro Val Ala Asp Pro Lys Thr Leu Asp Ser Val Thr Glu Leu Ala Ser
 885 890 895
 Glu Val Ser Gln Leu Asn Thr Ile Lys Glu His Leu Glu Glu Ile
 900 905 910
 Lys His His Gln Lys Ile Ile Glu Asp Gln Asn Gln Ser Lys Met Gln
 915 920 925
 Leu Leu Gln Ser Leu Gln Glu Gln Lys Lys Glu Met Asp Glu Phe Arg
 930 935 940
 Tyr Gln His Glu Gln Met Asn Ala Thr His Thr Gln Leu Phe Leu Glu
 945 950 955 960
 Lys Asp Glu Glu Ile Lys Ser Leu Gln Lys Thr Ile Glu Gln Ile Lys
 965 970 975
 Thr Gln Leu His Glu Glu Arg Gln Asp Ile Gln Thr Asp Asn Ser Asp
 980 985 990
 Ile Phe Gln Glu Thr Lys Val Gln Ser Leu Asn Ile Glu Asn Gly Ser
 995 1000 1005
 Glu Lys His Asp Leu Ser Lys Ala Glu Thr Glu Arg Leu Val Lys
 1010 1015 1020
 Gly Ile Lys Glu Arg Glu Leu Glu Ile Lys Leu Leu Asn Glu Lys
 1025 1030 1035
 Asn Ile Ser Leu Thr Lys Gln Ile Asp Gln Leu Ser Lys Asp Glu
 1040 1045 1050
 Val Gly Lys Leu Thr Gln Ile Ile Gln Gln Lys Asp Leu Glu Ile
 1055 1060 1065
 Gln Ala Leu His Ala Arg Ile Ser Ser Thr Ser His Thr Gln Asp
 1070 1075 1080
 Val Val Tyr Leu Gln Gln Leu Gln Ala Tyr Ala Met Glu Arg
 1085 1090 1095
 Glu Lys Val Phe Ala Val Leu Asn Glu Lys Thr Arg Glu Asn Ser
 1100 1105 1110
 His Leu Lys Thr Glu Tyr His Lys Met Met Asp Ile Val Ala Ala
 1115 1120 1125
 Lys Glu Ala Ala Leu Ile Lys Leu Gln Asp Glu Asn Lys Lys Leu

1130	Ser Thr Arg Phe Glu Ser	1135	Ser Gly Gln Asp Met	1140	Phe Arg Glu Thr
1145	Ile Gln Asn Leu Ser Arg	1150	Ile Arg Glu Lys	1155	Ile Glu Ile
1160	Asp Ala Leu Ser Gln Lys	1165	Gln Thr Leu Leu	1170	Val Leu Gln
1175	Thr Ser Ser Thr Gly Asn	1180	Ala Gly Gly Val	1185	Asn Ser His Gln
1190	Phe Glu Glu Leu Leu Gln	1195	Arg Asp Lys Leu	1200	Lys Gln Gln Val
1205	Lys Lys Met Glu Glu Trp	1210	Gln Gln Val Met	1215	Thr Val Gln
1220	Asn Met Gln His Glu Ser	1225	Gln Leu Gln Glu	1230	Glu Leu His Gln
1235	Leu Gln Ala Gln Val Leu	1240	Asp Ser Asp Asn	1245	Asn Ser Lys Leu
1250	Gln Val Asp Tyr Thr Gly	1255	Ile Gln Ser Tyr	1260	Glu Gln Asn Glu
1265	Thr Lys Leu Lys Asn Phe	1270	Gln Glu Leu Ala	1275	Gln Val Gln His
1280	Ser Ile Gly Gln Leu Cys	1285	Thr Lys Asp Leu	1290	Leu Leu Gly Lys
1295	Leu Asp Ile Ile Ser Pro	1300	Leu Ser Ser Ala	1305	Ser Leu Leu Thr
1310	Pro Gln Ser Ala Glu Cys	1315	Arg Ala Ser Lys	1320	Ser Glu Val Leu
1325	Ser Glu Ser Ser Glu Leu	1330	Gln Gln Glu Leu	1335	Glu Leu Arg
1340	Lys Ser Leu Gln Glu Lys	1345	Ala Thr Ile Arg	1350	Thr Leu Gln Glu
1355	Asn Asn His Arg Leu Ser	1360	Ser Ile Ala Ala	1365	Thr Ser Glu Leu
1370	Glu Arg Lys Glu His Glu	1375	Thr Asp Ser Glu	1380	Ile Lys Gln Leu
1385	Lys Glu Lys Gln Asp Val	1390	Gln Lys Leu Leu	1395	Lys Glu Lys Asp
1400	Leu Leu Ile Lys Ala Lys	1405	Asp Gln Leu Leu	1410	Ser Ser Asn Glu
1415	Asn Phe Thr Asn Lys Val	1420	Glu Asn Glu Leu	1425	Leu Arg Gln Ala
1430	Val Thr Asn Leu Lys Glu	1435	Ile Leu Ile Leu	1440	Glu Met Asp Ile
1445	Gly Lys Leu Lys Gly Glu	1450	Glu Lys Ile Val	1455	Glu Thr Tyr Arg
1460	Gly Lys Glu Thr Glu Tyr	1465	Ala Leu Gln Glu	1470	Thr Asn Met Lys
1475	Phe Ser Met Met Leu Arg	1480	Lys Glu Phe Glu	1485	Cys His Ser Met
1490	Lys Glu Lys Ala Leu Ala	1495	Glu Gln Leu Leu	1500	Lys Glu Lys Glu
1505	Gln Gly Lys Thr Gly Glu	1510	Asn Gln Leu Leu	1515	Asn Ala Val Lys
1520	Ser Met Gln Glu Lys Thr	1525	Val Phe Gln Gln	1530	Glu Arg Asp Gln
1535	Val Met Leu Ala Leu Lys	1540	Lys Gln Met Glu	1545	Asn Thr Ala Leu
1550	Gln Asn Glu Val Gln Arg	1555	Arg Asp Lys Glu	1560	Phe Arg Ser Asn
1565	Gln Glu Leu Glu Arg Leu	1570	Asn His Leu Leu	1575	Glu Ser Glu Asp
1580	Ser Tyr Thr Arg Glu Ala	1585	Ala Ala Glu Asp	1590	Arg Glu Ala Lys
1595	Leu Arg Lys Lys Val Thr	1600	Leu Glu Glu Lys	1605	Leu Val Ser Ser
1610	Ser Asn Ala Met Glu Asn	1615	Ser His Gln Ala	1620	Ser Val Gln Val
1625	Glu Ser Leu Gln Glu Gln	1630	Asn Val Val Ser	1635	Lys Gln Arg Asp
1640		1645		1650	

Glu Thr	Ala Leu Gln Leu Ser	Val Ser Gln Glu Gln	Val Lys Gln
1655	1660	1665	
Tyr Ala	Leu Ser Leu Ala Asn	Leu Gln Met Val Leu	Glu His Phe
1670	1675	1680	
Gln Gln	Glu Glu Lys Ala Met	Tyr Ser Ala Glu Leu	Glu Lys Gln
1685	1690	1695	
Lys Gln	Leu Ile Ala Glu Trp	Lys Lys Asn Ala Glu	Asn Leu Glu
1700	1705	1710	
Gly Lys	Val Ile Ser Leu Gln	Glu Cys Leu Asp Glu	Ala Asn Ala
1715	1720	1725	
Ala Leu	Asp Ser Ala Ser Arg	Leu Thr Glu Gln Leu	Asp Val Lys
1730	1735	1740	
Glu Glu	Gln Ile Glu Glu Leu	Lys Arg Gln Asn Glu	Leu Arg Gln
1745	1750	1755	
Glu Met	Leu Asp Asp Val Gln	Lys Lys Leu Met Ser	Leu Ala Asn
1760	1765	1770	
Ser Ser	Glu Gly Lys Val Asp	Lys Val Leu Met Arg	Asn Leu Phe
1775	1780	1785	
Ile Gly	His Phe His Thr Pro	Lys Asn Gln Arg His	Glu Val Leu
1790	1795	1800	
Arg Leu	Met Gly Ser Ile Leu	Gly Val Arg Arg Glu	Glu Met Glu
1805	1810	1815	
Gln Leu	Phe His Asp Asp Gln	Gly Ser Val Thr Arg	Trp Met Thr
1820	1825	1830	
Gly Trp	Leu Gly Gly Gly Ser	Lys Ser Val Pro Asn	Thr Pro Leu
1835	1840	1845	
Arg Pro	Asn Gln Gln Ser Val	Val Asn Ser Ser Phe	Ser Glu Leu
1850	1855	1860	
Phe Val	Lys Phe Leu Glu Thr	Glu Ser His Pro Ser	Ile Pro Pro
1865	1870	1875	
Pro Lys	Leu Ser Val His Asp	Met Lys Pro Leu Asp	Ser Pro Gly
1880	1885	1890	
Arg Arg	Lys Arg Asp Thr Asn	Ala Pro Glu Ser Phe	Lys Asp Thr
1895	1900	1905	
Ala Glu	Ser Arg Ser Gly Arg	Arg Thr Asp Val Asn	Pro Phe Leu
1910	1915	1920	
Ala Pro	Arg Ser Ala Ala Val	Pro Leu Ile Asn Pro	Ala Gly Leu
1925	1930	1935	
Gly Pro	Gly Gly Pro Gly His	Leu Leu Leu Lys Pro	Ile Ser Asp
1940	1945	1950	
Val Leu	Pro Thr Phe Thr Pro	Leu Pro Ala Leu Pro	Asp Asn Ser
1955	1960	1965	
Ala Gly	Val Val Leu Lys Asp	Leu Leu Lys Gln	
1970	1975		

<210> 243
 <211> 522
 <212> PRT
 <213> Homo sapiens
 <400> 243

Met Ser Ser Arg Pro Leu Glu Ser Pro	Pro Pro Tyr Arg Pro Asp Glu
1	5 10 15
Phe Lys Pro Asn His Tyr Ala Pro Ser	Asn Asp Ile Tyr Gly Gly Glu
20	25 30
Met His Val Arg Pro Met Leu Ser	Gln Pro Ala Tyr Ser Phe Tyr Pro
35	40 45
Glu Asp Glu Ile Leu His Phe Tyr	Lys Trp Thr Ser Pro Pro Gly Val
50	55 60
Ile Arg Ile Leu Ser Met Leu Ile Ile	Val Met Cys Ile Ala Ile Phe
65	70 75
Ala Cys Val Ala Ser Thr Leu Ala Trp	Asp Arg Gly Tyr Gly Thr Ser
85	90 95
Leu Leu Gly Gly Ser Val Gly Tyr Pro	Tyr Gly Gly Ser Gly Phe Gly
100	105 110
Ser Tyr Gly Ser Gly Tyr Gly Tyr	Gly Tyr Gly Tyr Gly Tyr Gly Tyr
115	120 125
Gly Gly Tyr Thr Asp Pro Arg Ala Ala	Lys Gly Phe Met Leu Ala Met
130	135 140
Ala Ala Phe Cys Phe Ile Ala Ala Leu	Val Ile Phe Val Thr Ser Val

145 150 155 160
 Ile Arg Ser Glu Met Ser Arg Thr Arg Arg Tyr Tyr Leu Ser Val Ile
 165 170 175
 Ile Val Ser Ala Ile Leu Gly Ile Met Val Phe Ile Ala Thr Ile Val
 180 185 190
 Tyr Ile Met Gly Val Asn Pro Thr Ala Gln Ser Ser Gly Ser Leu Tyr
 195 200 205
 Gly Ser Gln Ile Tyr Ala Leu Cys Asn Gln Phe Tyr Thr Pro Ala Ala
 210 215 220
 Thr Gly Leu Tyr Val Asp Gln Tyr Leu Tyr His Tyr Cys Val Val Asp
 225 230 235 240
 Pro Gln Glu Ala Ile Ala Ile Val Leu Gly Phe Met Ile Ile Val Ala
 245 250 255
 Phe Ala Leu Ile Ile Phe Phe Ala Val Lys Thr Arg Arg Lys Met Asp
 260 265 270
 Arg Tyr Asp Lys Ser Asn Ile Leu Trp Asp Lys Glu His Ile Tyr Asp
 275 280 285
 Glu Gln Pro Pro Asn Val Glu Glu Trp Val Lys Asn Val Ser Ala Gly
 290 295 300
 Thr Gln Asp Val Pro Ser Pro Pro Ser Asp Tyr Val Glu Arg Val Asp
 305 310 315 320
 Ser Pro Met Ala Tyr Ser Ser Asn Gly Lys Val Asn Asp Lys Arg Phe
 325 330 335
 Tyr Pro Glu Ser Ser Tyr Lys Ser Thr Pro Val Pro Glu Val Val Gln
 340 345 350
 Glu Leu Pro Leu Thr Ser Pro Val Asp Asp Phe Arg Gln Pro Arg Tyr
 355 360 365
 Ser Ser Gly Gly Asn Phe Glu Thr Pro Ser Lys Arg Ala Pro Ala Lys
 370 375 380
 Gly Arg Ala Gly Arg Ser Lys Arg Thr Glu Gln Asp His Tyr Glu Thr
 385 390 395 400
 Asp Tyr Thr Thr Gly Gly Glu Ser Cys Asp Glu Leu Glu Glu Asp Trp
 405 410 415
 Ile Arg Glu Tyr Pro Pro Ile Thr Ser Asp Gln Gln Arg Gln Leu Tyr
 420 425 430
 Lys Arg Asn Phe Asp Thr Gly Leu Gln Glu Tyr Lys Ser Leu Gln Ser
 435 440 445
 Glu Leu Asp Glu Ile Asn Lys Glu Leu Ser Arg Leu Asp Lys Glu Leu
 450 455 460
 Asp Asp Tyr Arg Glu Glu Ser Glu Glu Tyr Met Ala Ala Ala Asp Glu
 465 470 475 480
 Tyr Asn Arg Leu Lys Gln Val Lys Gly Ser Ala Asp Tyr Lys Ser Lys
 485 490 495
 Lys Asn His Cys Lys Gln Leu Lys Ser Lys Leu Ser His Ile Lys Lys
 500 505 510
 Met Val Gly Asp Tyr Asp Arg Gln Lys Thr
 515 520

<210> 244

<211> 2181

<212> PRT

<213> Homo sapiens

<400> 244

Met Met Met Met Met Met Met Lys Lys Met Gln His Gln Arg Gln Gln
 1 5 10 15
 Gln Ala Asp His Ala Asn Glu Ala Asn Tyr Ala Arg Gly Thr Arg Leu
 20 25 30
 Pro Leu Ser Ser Gly Glu Gly Pro Thr Ser Gln Pro Asn Ser Ser Lys Gln
 35 40 45
 Thr Val Leu Ser Trp Gln Ala Ala Ile Asp Ala Ala Arg Gln Ala Lys
 50 55 60
 Ala Ala Gln Thr Met Ser Thr Ser Ala Pro Pro Pro Val Gly Ser Leu
 65 70 75 80
 Ser Gln Arg Lys Arg Gln Gln Tyr Ala Lys Ser Lys Lys Gln Gly Asn
 85 90 95
 Ser Ser Asn Ser Arg Pro Ala Arg Ala Leu Phe Cys Leu Ser Leu Asn
 100 105 110
 Asn Pro Ile Arg Arg Ala Cys Ile Ser Ile Val Glu Trp Lys Pro Phe
 115 120 125

Asp Ile Phe Ile Leu Leu Ala Ile Phe Ala Asn Cys Val Ala Leu Ala
 130 135 140
 Ile Tyr Ile Pro Phe Pro Glu Asp Asp Ser Asn Ser Thr Asn His Asn
 145 150 155 160
 Leu Glu Lys Val Glu Tyr Ala Phe Leu Ile Ile Phe Thr Val Glu Thr
 165 170 175
 Phe Leu Lys Ile Ile Ala Tyr Gly Leu Leu Leu His Pro Asn Ala Tyr
 180 185 190
 Val Arg Asn Gly Trp Asn Leu Leu Asp Phe Val Ile Val Ile Val Gly
 195 200 205
 Leu Phe Ser Val Ile Leu Glu Gln Leu Thr Lys Glu Thr Glu Gly Gly
 210 215 220
 Asn His Ser Ser Gly Lys Ser Gly Gly Phe Asp Val Lys Ala Leu Arg
 225 230 235 240
 Ala Phe Arg Val Leu Arg Pro Leu Arg Leu Val Ser Gly Val Pro Ser
 245 250 255
 Leu Gln Val Val Leu Asn Ser Ile Ile Lys Ala Met Val Pro Leu Leu
 260 265 270
 His Ile Ala Leu Leu Val Leu Phe Val Ile Ile Ile Tyr Ala Ile Ile
 275 280 285
 Gly Leu Glu Leu Phe Ile Gly Lys Met His Lys Thr Cys Phe Phe Ala
 290 295 300
 Asp Ser Asp Ile Val Ala Glu Glu Asp Pro Ala Pro Cys Ala Phe Ser
 305 310 315 320
 Gly Asn Gly Arg Gln Cys Thr Ala Asn Gly Thr Glu Cys Arg Ser Gly
 325 330 335
 Trp Val Gly Pro Asn Gly Gly Ile Thr Asn Phe Asp Asn Phe Ala Phe
 340 345 350
 Ala Met Leu Thr Val Phe Gln Cys Ile Thr Met Glu Gly Trp Thr Asp
 355 360 365
 Val Leu Tyr Trp Val Asn Asp Ala Ile Gly Trp Glu Trp Pro Trp Val
 370 375 380
 Tyr Phe Val Ser Leu Ile Ile Leu Gly Ser Phe Phe Val Leu Asn Leu
 385 390 395 400
 Val Leu Gly Val Leu Ser Gly Glu Phe Ser Lys Glu Arg Glu Lys Ala
 405 410 415
 Lys Ala Arg Gly Asp Phe Gln Lys Leu Arg Glu Lys Gln Gln Leu Glu
 420 425 430
 Glu Asp Leu Lys Gly Tyr Leu Asp Trp Ile Thr Gln Ala Glu Asp Ile
 435 440 445
 Asp Pro Glu Asn Glu Glu Glu Gly Gly Glu Glu Gly Lys Arg Asn Thr
 450 455 460
 Ser Met Pro Thr Ser Glu Thr Glu Ser Val Asn Thr Glu Asn Val Ser
 465 470 475 480
 Gly Glu Gly Glu Asn Arg Gly Cys Cys Gly Ser Leu Trp Cys Trp Trp
 485 490 495
 Arg Arg Arg Gly Ala Ala Lys Ala Gly Pro Ser Gly Cys Arg Arg Trp
 500 505 510
 Gly Gln Ala Ile Ser Lys Ser Lys Leu Ser Arg Arg Trp Arg Arg Trp
 515 520 525
 Asn Arg Phe Asn Arg Arg Arg Cys Arg Ala Ala Val Lys Ser Val Thr
 530 535 540
 Phe Tyr Trp Leu Val Ile Val Leu Val Phe Leu Asn Thr Leu Thr Ile
 545 550 555 560
 Ser Ser Glu His Tyr Asn Gln Pro Asp Trp Leu Thr Gln Ile Gln Asp
 565 570 575
 Ile Ala Asn Lys Val Leu Leu Ala Leu Phe Thr Cys Glu Met Leu Val
 580 585 590
 Lys Met Tyr Ser Leu Gly Leu Gln Ala Tyr Phe Val Ser Leu Phe Asn
 595 600 605
 Arg Phe Asp Cys Phe Val Val Cys Gly Gly Ile Thr Glu Thr Ile Leu
 610 615 620
 Val Glu Leu Glu Ile Met Ser Pro Leu Gly Ile Ser Val Phe Arg Cys
 625 630 635 640
 Val Arg Leu Leu Arg Ile Phe Lys Val Thr Arg His Trp Thr Ser Leu
 645 650 655
 Ser Asn Leu Val Ala Ser Leu Leu Asn Ser Met Lys Ser Ile Ala Ser
 660 665 670
 Leu Leu Leu Leu Leu Phe Leu Phe Ile Ile Ile Phe Ser Leu Leu Gly

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Trp	Tyr	Val	Val	Asn	Ser	Ser	Pro	Phe	Glu	Tyr	Met	Met	Phe	Val
1220	1220					1225					1230			
Leu	Ile	Met	Leu	Asn	Thr	Leu	Cys	Leu	Ala	Met	Gln	His	Tyr	Glu
1235	1235					1240					1245			
Gln	Ser	Lys	Met	Phe	Asn	Asp	Ala	Met	Asp	Ile	Leu	Asn	Met	Val
1250	1250					1255					1260			
Phe	Thr	Gly	Val	Phe	Thr	Val	Glu	Met	Val	Leu	Lys	Val	Ile	Ala
1265	1265					1270					1275			
Phe	Lys	Pro	Lys	Gly	Tyr	Phe	Ser	Asp	Ala	Trp	Asn	Thr	Phe	Asp
1280	1280					1285					1290			
Ser	Leu	Ile	Val	Ile	Gly	Ser	Ile	Ile	Asp	Val	Ala	Leu	Ser	Glu
1295	1295					1300					1305			
Ala	Asp	Pro	Thr	Glu	Ser	Glu	Asn	Val	Pro	Val	Pro	Thr	Ala	Thr
1310	1310					1315					1320			
Pro	Gly	Asn	Ser	Glu	Glu	Ser	Asn	Arg	Ile	Ser	Ile	Thr	Phe	Phe
1325	1325					1330					1335			
Arg	Leu	Phe	Arg	Val	Met	Arg	Leu	Val	Lys	Leu	Leu	Ser	Arg	Gly
1340	1340					1345					1350			
Glu	Gly	Ile	Arg	Thr	Leu	Leu	Trp	Thr	Phe	Ile	Lys	Ser	Phe	Gln
1355	1355					1360					1365			
Ala	Leu	Pro	Tyr	Val	Ala	Leu	Leu	Ile	Ala	Met	Leu	Phe	Phe	Ile
1370	1370					1375					1380			
Tyr	Ala	Val	Ile	Gly	Met	Gln	Met	Phe	Gly	Lys	Val	Ala	Met	Arg
1385	1385					1390					1395			
Asp	Asn	Asn	Gln	Ile	Asn	Arg	Asn	Asn	Asn	Phe	Gln	Thr	Phe	Pro
1400	1400					1405					1410			
Gln	Ala	Val	Leu	Leu	Leu	Phe	Arg	Cys	Ala	Thr	Gly	Glu	Ala	Trp
1415	1415					1420					1425			
Gln	Glu	Ile	Met	Leu	Ala	Cys	Leu	Pro	Gly	Lys	Leu	Cys	Asp	Pro
1430	1430					1435					1440			
Glu	Ser	Asp	Tyr	Asn	Pro	Gly	Glu	Glu	Tyr	Thr	Cys	Gly	Ser	Asn
1445	1445					1450					1455			
Phe	Ala	Ile	Val	Tyr	Phe	Ile	Ser	Phe	Tyr	Met	Leu	Cys	Ala	Phe
1460	1460					1465					1470			
Leu	Ile	Ile	Asn	Leu	Phe	Val	Ala	Val	Ile	Met	Asp	Asn	Phe	Asp
1475	1475					1480					1485			
Tyr	Leu	Thr	Arg	Asp	Trp	Ser	Ile	Leu	Gly	Pro	His	His	Leu	Asp
1490	1490					1495					1500			
Glu	Phe	Lys	Arg	Ile	Trp	Ser	Glu	Tyr	Asp	Pro	Glu	Ala	Lys	Gly
1505	1505					1510					1515			
Arg	Ile	Lys	His	Leu	Asp	Val	Val	Thr	Leu	Leu	Arg	Arg	Ile	Gln
1520	1520					1525					1530			
Pro	Pro	Leu	Gly	Phe	Gly	Lys	Leu	Cys	Pro	His	Arg	Val	Ala	Cys
1535	1535					1540					1545			
Lys	Arg	Leu	Val	Ala	Met	Asn	Met	Pro	Leu	Asn	Ser	Asp	Gly	Thr
1550	1550					1555					1560			
Val	Met	Phe	Asn	Ala	Thr	Leu	Phe	Ala	Leu	Val	Arg	Thr	Ala	Leu
1565	1565					1570					1575			
Lys	Ile	Lys	Thr	Glu	Gly	Asn	Leu	Glu	Gln	Ala	Asn	Glu	Glu	Leu
1580	1580					1585					1590			
Arg	Ala	Val	Ile	Lys	Lys	Ile	Trp	Lys	Lys	Thr	Ser	Met	Lys	Leu
1595	1595					1600					1605			
Leu	Asp	Gln	Val	Val	Pro	Pro	Ala	Gly	Asp	Asp	Glu	Val	Thr	Val
1610	1610					1615					1620			
Gly	Lys	Phe	Tyr	Ala	Thr	Phe	Leu	Ile	Gln	Asp	Tyr	Phe	Arg	Lys
1625	1625					1630					1635			
Phe	Lys	Lys	Arg	Lys	Glu	Gln	Gly	Leu	Val	Gly	Lys	Tyr	Pro	Ala
1640	1640					1645					1650			
Lys	Asn	Thr	Thr	Ile	Ala	Leu	Gln	Ala	Gly	Leu	Arg	Thr	Leu	His
1655	1655					1660					1665			
Asp	Ile	Gly	Pro	Glu	Ile	Arg	Arg	Ala	Ile	Ser	Cys	Asp	Leu	Gln
1670	1670					1675					1680			
Asp	Asp	Glu	Pro	Glu	Glu	Thr	Lys	Arg	Glu	Glu	Glu	Asp	Asp	Val
1685	1685					1690					1695			
Phe	Lys	Arg	Asn	Gly	Ala	Leu	Leu	Gly	Asn	His	Val	Asn	His	Val
1700	1700					1705					1710			
Asn	Ser	Asp	Arg	Arg	Asp	Ser	Leu	Gln	Gln	Thr	Asn	Thr	Thr	His
1715	1715					1720					1725			
Arg	Pro	Leu	His	Val	Gln	Arg	Pro	Ser	Ile	Pro	Pro	Ala	Ser	Asp

1730	Thr Glu Lys Pro Leu Phe	1735	Pro Ala Gly Asn	1740	Ser Val Cys His
1745	Asn His His Asn His Asn	1750	Ile Gly Lys Gln	1755	Pro Thr Ser
1760	Thr Asn Ala Asn Leu Asn	1765	Ala Asn Met Ser	1770	Lys Ala Ala His
1775	Gly Lys Arg Pro Ser Ile	1780	Asn Leu Glu His	1785	Val Ser Glu Asn
1790	Gly His His Ser Ser His	1795	His Asp Arg Glu	1800	Pro Gln Arg Arg
1805	Ser Ser Val Lys Arg Thr	1810	Tyr Tyr Glu Thr	1815	Tyr Ile Arg Ser
1820	Asp Ser Gly Asp Glu Gln	1825	Pro Thr Ile Cys	1830	Arg Glu Asp Pro
1835	Glu Ile His Gly Tyr Phe	1840	Asp Pro His Cys	1845	Leu Gly Glu Gln
1850	Glu Tyr Phe Ser Ser Glu	1855	Cys Tyr Glu Asp	1860	Asp Ser Ser Pro
1865	Thr Trp Ser Arg Gln Asn	1870	Gly Tyr Tyr Ser	1875	Arg Tyr Pro Gly
1880	Arg Asn Ile Asp Ser Glu	1885	Pro Arg Gly Tyr	1890	His His Pro Gln
1895	Gly Phe Leu Glu Asp Asp	1900	Ser Pro Val Cys	1905	Tyr Asp Ser Arg
1910	Arg Ser Pro Arg Arg Arg	1915	Leu Pro Pro Thr	1920	Pro Ala Ser His
1925	Arg Arg Ser Ser Phe Asn	1930	Glu Cys Leu Arg	1935	Arg Gln Ser Ser
1940	Gln Glu Glu Val Pro Ser	1945	Pro Ile Phe Pro	1950	His Arg Thr Ala
1955	Leu Pro Leu His Leu Met	1960	Gln Gln Ile Met	1965	Ala Val Ala Gly
1970	Leu Asp Ser Ser Lys Ala	1975	Lys Tyr Ser Pro	1980	Ser His Ser Thr
1985	Arg Ser Trp Ala Thr Pro	1990	Ala Thr Pro Pro	1995	Tyr Arg Asp Trp
2000	Thr Pro Cys Tyr Thr Pro	2005	Ile Gln Val Glu	2010	Gln Ser Glu Ala
2015	Leu Asp Gln Val Asn Gly	2020	Leu Pro Ser Leu	2025	His Arg Ser Ser
2030	Trp Tyr Thr Asp Glu Pro	2035	Ile Ser Tyr Arg	2040	Thr Phe Thr Pro
2045	Ala Ser Leu Thr Val Pro	2050	Ser Phe Arg Asn	2055	Lys Asn Ser Asp
2060	Lys Gln Arg Ser Ala Asp	2065	Leu Val Glu Ala	2070	Val Leu Ile Ser
2075	Glu Gly Leu Gly Arg Tyr	2080	Arg Asp Pro Lys	2085	Phe Val Ser Ala
2090	Thr Lys His Glu Ile Ala	2095	Ala Cys Asp Leu	2100	Thr Ile Asp Glu
2105	Met Glu Ser Ala Ala Ser	2110	Leu Leu Asn Gly	2115	Asn Val Arg Pro
2120	Arg Ala Asn Gly Asp Val	2125	Pro Leu Ser His	2130	Arg Gln Asp Tyr
2135	Glu Leu Gln Asp Phe Gly	2140	Gly Tyr Ser Asp	2145	Glu Glu Pro Asp
2150	Pro Gly Arg Asp Glu Glu	2155	Leu Ala Asp Glu	2160	Met Ile Cys Ile
2165	Thr Thr Leu	2170		2175	
2180					

<210> 245
 <211> 377
 <212> PRT
 <213> Homo sapiens
 <400> 245

Met Glu Leu Ser Val Leu Leu Phe Leu Ala Leu Leu Thr Gly Leu Leu
 1 5 10 15

Leu Leu Leu Val Gln Arg His Pro Asn Ser His Gly Thr Leu Pro Pro
 20 25 30
 Gly Pro Arg Pro Leu Pro Leu Leu Gly Asn Leu Leu Gln Met Asp Arg
 35 40 45
 Arg Gly Leu Leu Lys Ser Phe Leu Arg Phe Arg Glu Lys Tyr Gly Asp
 50 55 60
 Val Phe Thr Val His Leu Gly Pro Arg Pro Val Val Met Leu Cys Gly
 65 70 75 80
 Val Glu Ala Ile Arg Glu Ala Leu Val Asp Asn Ala Glu Ala Phe Ser
 85 90 95
 Gly Arg Gly Lys Ile Val Ile Met Asp Pro Val Tyr Gln Gly Tyr Gly
 100 105 110
 Met Leu Phe Ala Asn Gly Asn Arg Trp Lys Val Leu Arg Arg Phe Ser
 115 120 125
 Val Thr Thr Met Arg Asp Phe Gly Met Gly Lys Arg Ser Val Glu Glu
 130 135 140
 Arg Ile Gln Asp Glu Ala Gln Cys Leu Ile Glu Glu Leu Arg Lys Ser
 145 150 155 160
 Lys Gly Ala Leu Val Asp Pro Thr Phe Leu Phe His Ser Ile Thr Ala
 165 170 175
 Asn Ile Ile Cys Ser Ile Ile Phe Gly Lys Arg Phe His Tyr Gln Asp
 180 185 190
 Gln Glu Phe Leu Lys Thr Leu Asn Leu Phe Cys Gln Ser Phe Leu Leu
 195 200 205
 Ile Ser Ser Ile Ser Ser Gln Leu Phe Glu Leu Phe Ser Gly Phe Leu
 210 215 220
 Lys Tyr Phe Pro Gly Ala His Arg Gln Val Tyr Lys Asn Leu Gln Glu
 225 230 235 240
 Ile Asn Ala Tyr Ile Gly His Ser Val Glu Lys His Arg Glu Thr Leu
 245 250 255
 Asp Pro Ser Ala Pro Arg Asp Leu Ile Asp Thr Tyr Leu Leu His Met
 260 265 270
 Glu Lys Glu Lys Ser Asn Pro His Ser Glu Phe Ser His Gln Asn Leu
 275 280 285
 Ile Ile Asn Thr Leu Ser Leu Phe Phe Ala Gly Thr Glu Thr Thr Ser
 290 295 300
 Thr Thr Leu Arg Tyr Gly Phe Leu Leu Met Leu Lys Tyr Pro His Val
 305 310 315 320
 Ala Glu Arg Val Tyr Lys Glu Ile Glu Gln Val Val Gly Pro His Arg
 325 330 335
 Pro Pro Ala Leu Asp Asp Arg Ala Lys Met Pro Tyr Thr Glu Ala Val
 340 345 350
 Ile Arg Glu Ile Gln Arg Phe Ala Asp Leu Leu Pro Met Gly Val Pro
 355 360 365
 His Ile Val Thr Gln His Thr Ser Phe
 370 375

<210> 246
 <211> 280
 <212> PRT
 <213> Homo sapiens
 <400> 246

Met Ala Glu Lys Phe Asp Cys His Tyr Cys Arg Asp Pro Leu Gln Gly
 1 5 10 15
 Lys Lys Tyr Val Gln Lys Asp Gly His His Cys Cys Leu Lys Cys Phe
 20 25 30
 Asp Lys Phe Cys Ala Asn Thr Cys Val Glu Cys Arg Lys Pro Ile Gly
 35 40 45
 Ala Asp Ser Lys Glu Val His Tyr Lys Asn Arg Phe Trp His Asp Thr
 50 55 60
 Cys Phe Arg Cys Ala Lys Cys Leu His Pro Leu Ala Asn Glu Thr Phe
 65 70 75 80
 Val Ala Lys Asp Asn Lys Ile Leu Cys Asn Lys Cys Thr Thr Arg Glu
 85 90 95
 Asp Ser Pro Lys Cys Lys Gly Cys Phe Lys Ala Ile Val Ala Gly Asp
 100 105 110
 Gln Asn Val Glu Tyr Lys Gly Thr Val Trp His Lys Asp Cys Phe Thr
 115 120 125
 Cys Ser Asn Cys Lys Gln Val Ile Gly Thr Gly Ser Phe Phe Pro Lys

130 135 140
 Gly Glu Asp Phe Tyr Cys Val Thr Cys His Glu Thr Lys Phe Ala Lys
 145 150 155 160
 His Cys Val Lys Cys Asn Lys Ala Ile Thr Ser Gly Gly Ile Thr Tyr
 165 170 175
 Gln Asp Gln Pro Trp His Ala Asp Cys Phe Val Cys Val Thr Cys Ser
 180 185 190
 Lys Lys Leu Ala Gly Gln Arg Phe Thr Ala Val Glu Asp Gln Tyr Tyr
 195 200 205
 Cys Val Asp Cys Tyr Lys Asn Phe Val Ala Lys Lys Cys Ala Gly Cys
 210 215 220
 Lys Asn Pro Ile Thr Gly Phe Gly Lys Gly Ser Ser Val Val Ala Tyr
 225 230 235 240
 Glu Gly Gln Ser Trp His Asp Tyr Cys Phe His Cys Lys Lys Cys Ser
 245 250 255
 Val Asn Leu Ala Asn Lys Arg Phe Val Phe His Gln Glu Gln Val Tyr
 260 265 270
 Cys Pro Asp Cys Ala Lys Lys Leu
 275 280

<210> 247
 <211> 267
 <212> PRT
 <213> Homo sapiens
 <400> 247

Met Ala Ser Pro Ser Lys Gly Asn Asp Leu Phe Ser Pro Asp Glu Glu
 1 5 10 15
 Gly Pro Ala Val Val Ala Gly Pro Gly Pro Gly Pro Gly Gly Ala Glu
 20 25 30
 Gly Ala Ala Glu Glu Arg Arg Val Lys Val Ser Ser Leu Pro Phe Ser
 35 40 45
 Val Glu Ala Leu Met Ser Asp Lys Lys Pro Pro Lys Glu Ala Ser Pro
 50 55 60
 Leu Pro Ala Glu Ser Ala Ser Ala Gly Ala Thr Leu Arg Pro Leu Leu
 65 70 75 80
 Leu Ser Gly His Gly Ala Arg Glu Ala His Ser Pro Gly Pro Leu Val
 85 90 95
 Lys Pro Phe Glu Thr Ala Ser Val Lys Ser Glu Asn Ser Glu Asp Gly
 100 105 110
 Ala Ala Trp Met Gln Glu Pro Gly Arg Tyr Ser Pro Pro Arg His
 115 120 125
 Met Ser Pro Thr Thr Cys Thr Leu Arg Lys His Lys Thr Asn Arg Lys
 130 135 140
 Pro Arg Thr Pro Phe Thr Thr Ser Gln Leu Leu Ala Leu Glu Arg Lys
 145 150 155 160
 Phe Arg Gln Lys Gln Tyr Leu Ser Ile Ala Glu Arg Ala Glu Phe Ser
 165 170 175
 Ser Ser Leu Asn Leu Thr Glu Thr Gln Val Lys Ile Trp Phe Gln Asn
 180 185 190
 Arg Arg Ala Lys Ala Lys Arg Leu Gln Glu Ala Glu Leu Glu Lys Leu
 195 200 205
 Lys Met Ala Ala Lys Pro Met Leu Pro Ser Ser Phe Ser Leu Pro Phe
 210 215 220
 Pro Ile Ser Ser Pro Leu Gln Ala Ala Ser Ile Tyr Gly Ala Ser Tyr
 225 230 235 240
 Pro Phe His Arg Pro Val Leu Pro Ile Pro Pro Val Gly Leu Tyr Ala
 245 250 255
 Thr Pro Val Gly Tyr Gly Met Tyr His Leu Ser
 260 265

<210> 248
 <211> 387
 <212> PRT
 <213> Homo sapiens
 <400> 248

Met Pro Gly His Leu Gln Glu Gly Phe Gly Cys Val Val Thr Asn Arg
 1 5 10 15
 Phe Asp Gln Leu Phe Asp Asp Glu Ser Asp Pro Phe Glu Val Leu Lys
 20 25 30

Ala Ala Glu Asn Lys Lys Lys Glu Ala Gly Gly Gly Gly Val Gly Gly
 35 40 45
 Pro Gly Ala Lys Ser Ala Ala Gln Ala Ala Ala Gln Thr Asn Ser Asn
 50 55 60
 Ala Ala Gly Lys Gln Leu Arg Lys Glu Ser Gln Lys Asp Arg Lys Asn
 65 70 75 80
 Pro Leu Pro Pro Ser Val Gly Val Val Asp Lys Lys Glu Glu Thr Gln
 85 90 95
 Pro Pro Val Ala Leu Lys Lys Glu Gly Ile Arg Arg Val Gly Arg Arg
 100 105 110
 Pro Asp Gln Gln Leu Gln Gly Glu Gly Lys Ile Ile Asp Arg Arg Pro
 115 120 125
 Glu Arg Arg Pro Pro Arg Glu Arg Arg Phe Glu Lys Pro Leu Glu Glu
 130 135 140
 Lys Gly Glu Gly Gly Glu Phe Ser Val Asp Arg Pro Ile Ile Asp Arg
 145 150 155 160
 Pro Ile Arg Gly Arg Gly Gly Leu Gly Arg Gly Arg Gly Gly Arg Gly
 165 170 175
 Arg Gly Met Gly Arg Gly Asp Gly Phe Asp Ser Arg Gly Lys Arg Glu
 180 185 190
 Phe Asp Arg His Ser Gly Ser Asp Arg Ser Gly Leu Lys His Glu Asp
 195 200 205
 Lys Arg Gly Gly Ser Gly Ser His Asn Trp Gly Thr Val Lys Asp Glu
 210 215 220
 Leu Thr Asp Leu Asp Gln Ser Asn Val Thr Glu Glu Thr Pro Glu Gly
 225 230 235 240
 Glu Glu His His Pro Val Ala Asp Thr Glu Asn Lys Glu Asn Glu Val
 245 250 255
 Glu Glu Val Lys Glu Glu Gly Pro Lys Glu Met Thr Leu Asp Glu Trp
 260 265 270
 Lys Ala Ile Gln Asn Lys Asp Arg Ala Lys Val Glu Phe Asn Ile Arg
 275 280 285
 Lys Pro Asn Glu Gly Ala Asp Gly Gln Trp Lys Lys Gly Phe Val Leu
 290 295 300
 His Lys Ser Lys Ser Glu Glu Ala His Ala Glu Asp Ser Val Met Asp
 305 310 315 320
 His His Phe Arg Lys Pro Ala Asn Asp Ile Thr Ser Gln Leu Glu Ile
 325 330 335
 Asn Phe Gly Asp Leu Gly Arg Pro Gly Arg Gly Gly Arg Gly Arg
 340 345 350
 Gly Gly Arg Gly Arg Gly Gly Arg Pro Asn Arg Gly Ser Arg Thr Asp
 355 360 365
 Lys Ser Ser Ala Ser Ala Pro Asp Val Asp Asp Pro Glu Ala Phe Pro
 370 375 380
 Ala Leu Ala
 385

<210> 249
 <211> 239
 <212> PRT
 <213> Homo sapiens
 <400> 249

Met Ala Ser Thr Ala Val Gln Leu Leu Gly Phe Leu Leu Ser Phe Leu
 1 5 10 15
 Gly Met Val Gly Thr Leu Ile Thr Thr Ile Leu Pro His Trp Arg Arg
 20 25 30
 Thr Ala His Val Gly Thr Asn Ile Leu Thr Ala Val Ser Tyr Leu Lys
 35 40 45
 Gly Leu Trp Met Glu Cys Val Trp His Ser Thr Gly Ile Tyr Gln Cys
 50 55 60
 Gln Ile Tyr Arg Ser Leu Leu Ala Leu Pro Gln Asp Leu Gln Ala Ala
 65 70 75 80
 Arg Ala Leu Met Val Ile Ser Cys Leu Leu Ser Gly Ile Ala Cys Ala
 85 90 95
 Cys Ala Val Ile Gly Met Lys Cys Thr Arg Cys Ala Lys Gly Thr Pro
 100 105 110
 Ala Lys Thr Thr Phe Ala Ile Leu Gly Gly Thr Leu Phe Ile Leu Ala
 115 120 125
 Gly Leu Leu Cys Met Val Ala Val Ser Trp Thr Thr Asn Asp Val Val

130
 Gln Asn Phe Tyr Asn Pro Leu Leu Pro Ser Gly Met Lys Phe Glu Ile
 145
 Gly Gln Ala Leu Tyr Leu Gly Phe Ile Ser Ser Ser Leu Ser Leu Ile
 165
 Gly Gly Thr Leu Leu Cys Leu Ser Cys Gln Asp Glu Ala Pro Tyr Arg
 180
 Pro Tyr Gln Ala Pro Pro Arg Ala Thr Thr Thr Thr Ala Asn Thr Ala
 195
 Pro Ala Tyr Gln Pro Pro Ala Ala Tyr Lys Asp Asn Arg Ala Pro Ser
 210
 Val Thr Ser Ala Thr His Ser Gly Tyr Arg Leu Asn Asp Tyr Val
 225
 230
 235

 <210> 250
 <211> 414
 <212> PRT
 <213> Homo sapiens
 <400> 250
 Met Gln Thr Phe Leu Lys Gly Lys Arg Val Gly Tyr Trp Leu Ser Glu
 1
 5
 Lys Lys Ile Lys Lys Leu Asn Phe Gln Ala Phe Ala Glu Leu Cys Arg
 20
 Lys Arg Gly Met Glu Val Val Gln Leu Asn Leu Ser Arg Pro Ile Glu
 35
 40
 Glu Gln Gly Pro Leu Asp Val Ile Ile His Lys Leu Thr Asp Val Ile
 50
 55
 Leu Glu Ala Asp Gln Asn Asp Ser Gln Ser Leu Glu Leu Val His Arg
 65
 70
 Phe Gln Glu Tyr Ile Asp Ala His Pro Glu Thr Ile Val Leu Asp Pro
 85
 90
 Leu Pro Ala Ile Arg Thr Leu Leu Asp Arg Ser Lys Ser Tyr Glu Leu
 100
 105
 Ile Arg Lys Ile Glu Ala Tyr Met Glu Asp Asp Arg Ile Cys Ser Pro
 115
 120
 Pro Phe Met Glu Leu Thr Ser Leu Cys Gly Asp Asp Thr Met Arg Leu
 130
 135
 Leu Glu Lys Asn Gly Leu Thr Phe Pro Phe Ile Cys Lys Thr Arg Val
 145
 150
 Ala His Gly Thr Asn Ser His Glu Met Ala Ile Val Phe Asn Gln Glu
 165
 170
 Gly Leu Asn Ala Ile Gln Pro Pro Cys Val Val Gln Asn Phe Ile Asn
 180
 185
 His Asn Ala Val Leu Tyr Lys Val Phe Val Val Gly Glu Ser Tyr Thr
 195
 200
 Val Val Gln Arg Pro Ser Leu Lys Asn Phe Ser Ala Gly Thr Ser Asp
 210
 215
 Arg Glu Ser Ile Phe Phe Asn Ser His Asn Val Ser Lys Pro Glu Ser
 225
 230
 Ser Ser Val Leu Thr Glu Leu Asp Lys Ile Glu Gly Val Phe Glu Arg
 245
 250
 Pro Ser Asp Glu Val Ile Arg Glu Leu Ser Arg Ala Leu Arg Gln Ala
 260
 265
 Leu Gly Val Ser Leu Phe Gly Ile Asp Ile Ile Ile Asn Asn Gln Thr
 275
 280
 Gly Gln His Ala Val Ile Asp Ile Asn Ala Phe Pro Gly Tyr Glu Gly
 290
 295
 Val Ser Glu Phe Phe Thr Asp Leu Leu Asn His Ile Ala Thr Val Leu
 305
 310
 Gln Gly Gln Ser Thr Ala Met Ala Ala Thr Gly Asp Val Ala Leu Leu
 325
 330
 Arg His Ser Lys Leu Leu Ala Glu Pro Ala Gly Gly Leu Val Gly Glu
 340
 345
 Arg Thr Cys Ser Ala Ser Pro Gly Cys Cys Gly Ser Met Met Gly Gln
 355
 360
 Asp Ala Pro Trp Lys Ala Glu Ala Asp Ala Gly Gly Thr Ala Lys Leu
 370
 375
 Pro His Gln Arg Leu Gly Cys Asn Ala Gly Val Ser Pro Ser Phe Gln
 385
 390
 395
 400

Gln His Cys Val Ala Ser Leu Ala Thr Lys Ala Ser Ser Gln
 405 410

<210> 251
 <211> 1255
 <212> PRT
 <213> Homo sapiens
 <400> 251

Met Glu Leu Ala Ala Leu Cys Arg Trp Gly Leu Leu Leu Ala Leu Leu
 1 5 10 15
 Pro Pro Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr Asp Met Lys
 20 25 30
 Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met Leu Arg His
 35 40 45
 Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu Leu Thr Tyr
 50 55 60
 Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile Gln Glu Val
 65 70 75 80
 Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln Val Pro Leu
 85 90 95
 Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu Asp Asn Tyr
 100 105 110
 Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn Thr Thr Pro
 115 120 125
 Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln Leu Arg Ser
 130 135 140
 Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg Asn Pro Gln
 145 150 155 160
 Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe His Lys Asn
 165 170 175
 Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys
 180 185 190
 His Pro Cys Ser Pro Met Cys Lys Gly Ser Arg Cys Trp Gly Glu Ser
 195 200 205
 Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala Gly Gly Cys
 210 215 220
 Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His Glu Gln Cys
 225 230 235 240
 Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu Ala Cys Leu
 245 250 255
 His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro Ala Leu Val
 260 265 270
 Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro Glu Gly Arg
 275 280 285
 Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr Asn Tyr Leu
 290 295 300
 Ser Thr Asp Val Gly Ser Cys Thr Leu Val Cys Pro Leu His Asn Gln
 305 310 315 320
 Glu Val Thr Ala Glu Asp Gly Thr Gln Arg Cys Glu Lys Cys Ser Lys
 325 330 335
 Pro Cys Ala Arg Val Cys Tyr Gly Leu Gly Met Glu His Leu Arg Glu
 340 345 350
 Val Arg Ala Val Thr Ser Ala Asn Ile Gln Glu Phe Ala Gly Cys Lys
 355 360 365
 Lys Ile Phe Gly Ser Leu Ala Phe Leu Pro Glu Ser Phe Asp Gly Asp
 370 375 380
 Pro Ala Ser Asn Thr Ala Pro Leu Gln Pro Glu Gln Leu Gln Val Phe
 385 390 395 400
 Glu Thr Leu Glu Glu Ile Thr Gly Tyr Leu Tyr Ile Ser Ala Trp Pro
 405 410 415
 Asp Ser Leu Pro Asp Leu Ser Val Phe Gln Asn Leu Gln Val Ile Arg
 420 425 430
 Gly Arg Ile Leu His Asn Gly Ala Tyr Ser Leu Thr Leu Gln Gly Leu
 435 440 445
 Gly Ile Ser Trp Leu Gly Leu Arg Ser Leu Arg Glu Leu Gly Ser Gly
 450 455 460
 Leu Ala Leu Ile His His Asn Thr His Leu Cys Phe Val His Thr Val
 465 470 475 480
 Pro Trp Asp Gln Leu Phe Arg Asn Pro His Gln Ala Leu Leu His Thr

Ala	Asn	Arg	Pro	485	Glu	Asp	Glu	Cys	Val	490	Gly	Glu	Gly	Leu	Ala	495	Cys	His
Gln	Leu	Cys	500	Ala	Arg	Gly	His	Cys	505	Trp	Gly	Pro	Gly	Pro	510	Thr	Gln	Cys
Val	Asn	Cys	515	Ser	Gln	Phe	Leu	Arg	520	Gly	Gln	Glu	Cys	525	Val	Glu	Glu	Cys
Arg	Val	Leu	530	Gln	Gly	Leu	Pro	Arg	535	Glu	Tyr	Val	Asn	540	Ala	Arg	His	Cys
Leu	Pro	Cys	545	His	Pro	Glu	Cys	Gln	550	Pro	Gln	Asn	Gly	555	Ser	Val	Thr	Cys
Phe	Gly	Pro	565	Glu	Ala	Asp	Gln	Cys	570	Val	Ala	Cys	Ala	575	His	Tyr	Lys	Asp
Pro	Pro	Phe	580	Cys	Val	Ala	Arg	Cys	585	Pro	Ser	Gly	Val	590	Lys	Pro	Asp	Leu
Ser	Tyr	Met	595	Pro	Ile	Trp	Lys	Phe	600	Pro	Asp	Glu	Glu	605	Ala	Cys	Gln	
Pro	Cys	Pro	610	Ile	Asn	Cys	Thr	His	615	Ser	Cys	Val	Asp	620	Leu	Asp	Asp	Lys
Gly	Cys	Pro	625	Ala	Glu	Gln	Arg	Ala	630	Ser	Pro	Leu	Thr	635	Ser	Ile	Val	Ser
Ala	Val	Val	645	Gly	Ile	Leu	Leu	Val	650	Val	Val	Leu	Gly	655	Val	Val	Phe	Gly
Ile	Leu	Ile	660	Lys	Arg	Arg	Gln	Gln	665	Lys	Ile	Arg	Lys	670	Tyr	Thr	Met	Arg
Arg	Leu	Leu	675	Gln	Glu	Thr	Glu	Leu	680	Val	Glu	Pro	Leu	685	Thr	Pro	Ser	Gly
Ala	Met	Pro	690	Asn	Gln	Ala	Gln	Met	695	Arg	Ile	Leu	Lys	700	Glu	Thr	Glu	Leu
Arg	Lys	Val	705	Lys	Val	Leu	Gly	Ser	710	Gly	Ala	Phe	Gly	715	Thr	Val	Tyr	Lys
Gly	Ile	Trp	725	Ile	Pro	Asp	Gly	Glu	730	Asn	Val	Lys	Ile	735	Pro	Val	Ala	Ile
Lys	Val	Leu	740	Arg	Glu	Asn	Thr	Ser	745	Pro	Lys	Ala	Asn	750	Lys	Glu	Ile	Leu
Asp	Glu	Ala	755	Tyr	Val	Met	Ala	Gly	760	Val	Gly	Ser	Pro	765	Tyr	Val	Ser	Arg
Leu	Leu	Gly	770	Ile	Cys	Leu	Thr	Ser	775	Thr	Val	Gln	Leu	780	Val	Thr	Gln	Leu
Met	Pro	Tyr	785	Gly	Cys	Leu	Leu	Asp	790	His	Val	Arg	Glu	795	Asn	Arg	Gly	Arg
Leu	Gly	Ser	805	Gln	Asp	Leu	Leu	Asn	810	Trp	Cys	Met	Gln	815	Ile	Ala	Lys	Gly
Met	Ser	Tyr	820	Leu	Glu	Asp	Val	Arg	825	Leu	Val	His	Arg	830	Asp	Leu	Ala	Ala
Arg	Asn	Val	835	Leu	Val	Lys	Ser	Pro	840	Asn	His	Val	Lys	845	Ile	Thr	Asp	Phe
Gly	Leu	Ala	850	Arg	Leu	Leu	Asp	Ile	855	Asp	Glu	Thr	Glu	860	Tyr	His	Ala	Asp
Gly	Gly	Lys	865	Val	Pro	Ile	Lys	Trp	870	Met	Ala	Leu	Glu	875	Ser	Ile	Leu	Arg
Arg	Arg	Phe	885	Thr	His	Gln	Ser	Asp	890	Val	Trp	Ser	Tyr	895	Gly	Val	Thr	Val
Trp	Glu	Leu	900	Met	Thr	Phe	Gly	Ala	905	Lys	Pro	Tyr	Asp	910	Gly	Ile	Pro	Ala
Arg	Glu	Ile	915	Pro	Asp	Leu	Leu	Glu	920	Lys	Gly	Glu	Arg	925	Leu	Pro	Gln	Pro
Pro	Ile	Cys	930	Thr	Ile	Asp	Val	Tyr	935	Met	Ile	Met	Val	940	Lys	Cys	Trp	Met
Ile	Asp	Ser	945	Glu	Cys	Arg	Pro	Arg	950	Phe	Arg	Glu	Leu	955	Val	Ser	Glu	Phe
Ser	Arg	Met	965	Ala	Arg	Asp	Pro	Gln	970	Phe	Val	Val	Ile	975	Gln	Asn	Glu	
Asp	Leu	Gly	980	Pro	Ala	Ser	Pro	Leu	985	Asp	Ser	Thr	Phe	990	Tyr	Arg	Ser	Leu
Leu	Glu	Asp	995	Asp	Asp	Met	Gly	Asp	1000	Leu	Val	Asp	Ala	1005	Glu	Glu	Tyr	
Leu	Val	Pro	1010	Gln	Gln	Gly	Phe	Phe	1015	Cys	Pro	Asp	Pro	1020	Ala	Pro	Gly	
			1025						1030					1035				

Ala	Gly	Gly	Met	Val	His	His	Arg	His	Arg	Ser	Ser	Ser	Thr	Arg
1040						1045					1050			
Ser	Gly	Gly	Gly	Asp	Leu	Thr	Leu	Gly	Leu	Glu	Pro	Ser	Glu	Glu
1055						1060					1065			
Glu	Ala	Pro	Arg	Ser	Pro	Leu	Ala	Pro	Ser	Glu	Gly	Ala	Gly	Ser
1070						1075					1080			
Asp	Val	Phe	Asp	Gly	Asp	Leu	Gly	Met	Gly	Ala	Ala	Lys	Gly	Leu
1085						1090					1095			
Gln	Ser	Leu	Pro	Thr	His	Asp	Pro	Ser	Pro	Leu	Gln	Arg	Tyr	Ser
1100						1105					1110			
Glu	Asp	Pro	Thr	Val	Pro	Leu	Pro	Ser	Glu	Thr	Asp	Gly	Tyr	Val
1115						1120					1125			
Ala	Pro	Leu	Thr	Cys	Ser	Pro	Gln	Pro	Glu	Tyr	Val	Asn	Gln	Pro
1130						1135					1140			
Asp	Val	Arg	Pro	Gln	Pro	Pro	Ser	Pro	Arg	Glu	Gly	Pro	Leu	Pro
1145						1150					1155			
Ala	Ala	Arg	Pro	Ala	Gly	Ala	Thr	Leu	Glu	Arg	Ala	Lys	Thr	Leu
1160						1165					1170			
Ser	Pro	Gly	Lys	Asn	Gly	Val	Val	Lys	Asp	Val	Phe	Ala	Phe	Gly
1175						1180					1185			
Gly	Ala	Val	Glu	Asn	Pro	Glu	Tyr	Leu	Thr	Pro	Gln	Gly	Gly	Ala
1190						1195					1200			
Ala	Pro	Gln	Pro	His	Pro	Pro	Pro	Ala	Phe	Ser	Pro	Ala	Phe	Asp
1205						1210					1215			
Asn	Leu	Tyr	Tyr	Trp	Asp	Gln	Asp	Pro	Pro	Glu	Arg	Gly	Ala	Pro
1220						1225					1230			
Pro	Ser	Thr	Phe	Lys	Gly	Thr	Pro	Thr	Ala	Glu	Asn	Pro	Glu	Tyr
1235						1240					1245			
Leu	Gly	Leu	Asp	Val	Pro	Val								
1250						1255								

<210> 252

<211> 393

<212> PRT

<213> Homo sapiens

<400> 252

Met	Glu	Glu	Pro	Gln	Ser	Asp	Pro	Ser	Val	Glu	Pro	Pro	Leu	Ser	Gln
1				5					10					15	
Glu	Thr	Phe	Ser	Asp	Leu	Trp	Lys	Leu	Leu	Pro	Glu	Asn	Asn	Val	Leu
			20					25					30		
Ser	Pro	Leu	Pro	Ser	Gln	Ala	Met	Asp	Asp	Leu	Met	Leu	Ser	Pro	Asp
			35				40					45			
Asp	Ile	Glu	Gln	Trp	Phe	Thr	Glu	Asp	Pro	Gly	Pro	Asp	Glu	Ala	Pro
			50			55					60				
Arg	Met	Pro	Glu	Ala	Ala	Pro	Arg	Val	Ala	Pro	Ala	Pro	Ala	Ala	Pro
65				70					75						80
Thr	Pro	Ala	Ala	Pro	Ala	Pro	Ala	Pro	Ser	Trp	Pro	Leu	Ser	Ser	Ser
				85				90					95		
Val	Pro	Ser	Gln	Lys	Thr	Tyr	Gln	Gly	Ser	Tyr	Gly	Phe	Arg	Leu	Gly
			100					105					110		
Phe	Leu	His	Ser	Gly	Thr	Ala	Lys	Ser	Val	Thr	Cys	Thr	Tyr	Ser	Pro
			115				120					125			
Ala	Leu	Asn	Lys	Met	Phe	Cys	Gln	Leu	Ala	Lys	Thr	Cys	Pro	Val	Gln
			130			135					140				
Leu	Trp	Val	Asp	Ser	Thr	Pro	Pro	Pro	Gly	Thr	Arg	Val	Arg	Ala	Met
145				150					155						160
Ala	Ile	Tyr	Lys	Gln	Ser	Gln	His	Met	Thr	Glu	Val	Val	Arg	Arg	Cys
			165					170						175	
Pro	His	His	Glu	Arg	Cys	Ser	Asp	Ser	Asp	Gly	Leu	Ala	Pro	Pro	Gln
			180				185						190		
His	Leu	Ile	Arg	Val	Glu	Gly	Asn	Leu	Arg	Val	Glu	Tyr	Leu	Asp	Asp
			195				200					205			
Arg	Asn	Thr	Phe	Arg	His	Ser	Val	Val	Val	Pro	Tyr	Glu	Pro	Pro	Glu
			210			215					220				
Val	Gly	Ser	Asp	Cys	Thr	Thr	Ile	His	Tyr	Asn	Tyr	Met	Cys	Asn	Ser
225				230					235						240
Ser	Cys	Met	Gly	Gly	Met	Asn	Arg	Arg	Pro	Ile	Leu	Thr	Ile	Ile	Thr
			245						250					255	
Leu	Glu	Asp	Ser	Ser	Gly	Asn	Leu	Leu	Gly	Arg	Asn	Ser	Phe	Glu	Val

260
 Arg Val Cys Ala Cys Pro Gly Arg Asp Arg Arg Thr Glu Glu Glu Asn
 275
 Leu Arg Lys Lys Gly Glu Pro His His Glu Leu Pro Pro Gly Ser Thr
 290
 Lys Arg Ala Leu Pro Asn Asn Thr Ser Ser Ser Ser Pro Gln Pro Lys Lys
 305
 Lys Pro Leu Asp Gly Glu Tyr Phe Thr Leu Gln Ile Arg Gly Arg Glu
 325
 Arg Phe Glu Met Phe Arg Glu Leu Asn Glu Ala Leu Glu Leu Lys Asp
 340
 Ala Gln Ala Gly Lys Glu Pro Gly Gly Ser Arg Ala His Ser Ser His
 355
 Leu Lys Ser Lys Lys Gly Gln Ser Thr Ser Arg His Lys Lys Leu Met
 370
 Phe Lys Thr Glu Gly Pro Asp Ser Asp
 385
 390

265
 270

<210> 253
 <211> 639
 <212> PRT
 <213> Homo sapiens
 <400> 253

Met Ser Ala Arg Gly Pro Ala Ile Gly Ile Asp Leu Gly Thr Thr Tyr
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 Ser Cys Val Gly Val Phe Gln His Gly Lys Val Glu Ile Ile Ala Asn
 20
 Asp Gln Gly Asn Arg Thr Thr Pro Ser Tyr Val Ala Phe Thr Asp Thr
 35
 Glu Arg Leu Ile Gly Asp Ala Lys Asn Gln Val Ala Met Asn Pro
 50
 Thr Asn Thr Ile Phe Asp Ala Lys Arg Leu Ile Gly Arg Lys Phe Glu
 65
 Asp Ala Thr Val Gln Ser Asp Met Lys His Trp Pro Phe Arg Val Val
 85
 Ser Glu Gly Gly Lys Pro Lys Val Gln Val Glu Tyr Lys Gly Glu Thr
 100
 Lys Thr Phe Phe Pro Glu Glu Ile Ser Ser Met Val Leu Thr Lys Met
 115
 Lys Glu Ile Ala Glu Ala Tyr Phe Asn Asp Ser Gln Arg Gln Ala Thr Lys
 130
 Ile Thr Val Pro Ala Tyr Phe Asn Asp Ser Gln Arg Gln Ala Thr Lys
 145
 Asp Ala Gly Thr Ile Thr Gly Leu Asn Val Leu Arg Ile Ile Asn Glu
 165
 Pro Thr Ala Ala Ala Ile Ala Tyr Gly Leu Asp Lys Lys Gly Cys Ala
 180
 Gly Gly Glu Lys Asn Val Leu Ile Phe Asp Leu Gly Gly Gly Thr Phe
 195
 Asp Val Ser Ile Leu Thr Ile Glu Asp Gly Ile Phe Glu Val Lys Ser
 210
 Thr Ala Gly Asp Thr His Leu Gly Gly Glu Asp Phe Asp Asn Arg Met
 225
 Val Ser His Leu Ala Glu Glu Phe Lys Arg Lys His Lys Lys Asp Ile
 245
 Gly Pro Asn Lys Arg Ala Val Arg Arg Leu Arg Thr Ala Cys Glu Arg
 260
 Ala Lys Arg Thr Leu Ser Ser Ser Thr Gln Ala Ser Ile Glu Ile Asp
 275
 Ser Leu Tyr Glu Gly Val Asp Phe Tyr Thr Ser Ile Thr Arg Ala Arg
 290
 Phe Glu Glu Leu Asn Ala Asp Leu Phe Arg Gly Thr Leu Glu Pro Val
 305
 Glu Lys Ala Leu Arg Asp Ala Lys Leu Asp Lys Gly Gln Ile Gln Glu
 325
 Ile Val Leu Val Gly Gly Ser Thr Arg Ile Pro Lys Ile Gln Lys Leu
 340
 Leu Gln Asp Phe Phe Asn Gly Lys Glu Leu Asn Lys Ser Ile Asn Pro
 355
 360
 365

Asp Glu Ala Val Ala Tyr Gly Ala Ala Val Gln Ala Ala Ile Leu Ile
 370 375 380
 Gly Asp Lys Ser Glu Asn Val Gln Asp Leu Leu Leu Asp Val Thr
 385 390 395
 Pro Leu Ser Leu Gly Ile Glu Thr Ala Gly Val Met Thr Pro Leu
 400 405 410
 Ile Lys Arg Asn Thr Thr Ile Pro Thr Lys Gln Thr Gln Thr Phe Thr
 420 425 430
 Thr Tyr Ser Asp Asn Gln Ser Ser Val Leu Val Gln Val Tyr Glu Gly
 435 440 445
 Glu Arg Ala Met Thr Lys Asp Asn Asn Leu Leu Gly Lys Phe Asp Leu
 450 455 460
 Thr Gly Ile Pro Pro Ala Pro Arg Gly Val Pro Gln Ile Glu Val Thr
 465 470 475
 Phe Asp Ile Asp Ala Asn Gly Ile Leu Asn Val Thr Ala Ala Asp Lys
 480 485 490 495
 Ser Thr Gly Lys Glu Asn Lys Ile Thr Ile Thr Asn Asp Lys Gly Arg
 500 505 510
 Leu Ser Lys Asp Asp Ile Asp Arg Met Val Gln Glu Ala Glu Arg Tyr
 515 520 525
 Lys Ser Glu Asp Glu Ala Asn Arg Asp Arg Val Ala Ala Lys Asn Ala
 530 535 540
 Leu Glu Ser Tyr Thr Tyr Asn Ile Lys Gln Thr Val Glu Asp Glu Lys
 545 550 555
 Leu Arg Gly Lys Ile Ser Glu Gln Asp Lys Asn Lys Ile Leu Asp Lys
 560 565 570 575
 Cys Gln Glu Val Ile Asn Trp Leu Asp Arg Asn Gln Met Ala Glu Lys
 580 585 590
 Asp Glu Tyr Glu His Lys Gln Lys Glu Leu Glu Arg Val Cys Asn Pro
 595 600 605
 Ile Ile Ser Lys Leu Tyr Gln Gly Gly Pro Gly Gly Ser Gly Gly
 610 615 620
 Gly Gly Ser Gly Ala Ser Gly Gly Pro Thr Ile Glu Glu Val Asp
 625 630 635

<210> 254

<211> 1094

<212> PRT

<213> Homo sapiens

<400> 254

Met Ala Arg Pro Val Arg Gly Gly Leu Gly Ala Pro Arg Arg Ser Pro
 1 5 10 15
 Cys Leu Leu Leu Leu Trp Leu Leu Leu Leu Arg Leu Glu Pro Val Thr
 20 25 30
 Ala Ala Ala Gly Pro Arg Ala Pro Cys Ala Ala Ala Cys Thr Cys Ala
 35 40 45
 Gly Asp Ser Leu Asp Cys Gly Gly Arg Gly Leu Ala Ala Leu Pro Gly
 50 55 60
 Asp Leu Pro Ser Trp Thr Arg Ser Leu Asn Leu Ser Tyr Asn Lys Leu
 65 70 75 80
 Ser Glu Ile Asp Pro Ala Gly Phe Glu Asp Leu Pro Asn Leu Gln Glu
 85 90 95
 Val Tyr Leu Asn Asn Asn Glu Leu Thr Ala Val Pro Ser Leu Gly Ala
 100 105 110
 Ala Ser Ser His Val Val Ser Leu Phe Leu Gln His Asn Lys Ile Arg
 115 120 125
 Ser Val Glu Gly Ser Gln Leu Lys Ala Tyr Leu Ser Leu Glu Val Leu
 130 135 140
 Asp Leu Ser Leu Asn Asn Ile Thr Glu Val Arg Asn Thr Cys Phe Pro
 145 150 155 160
 His Gly Pro Pro Ile Lys Glu Leu Asn Leu Ala Gly Asn Arg Ile Gly
 165 170 175
 Thr Leu Glu Leu Gly Ala Phe Asp Gly Leu Ser Arg Ser Leu Leu Thr
 180 185 190
 Leu Arg Leu Ser Lys Asn Arg Ile Thr Gln Leu Pro Val Arg Ala Phe
 195 200 205
 Lys Leu Pro Arg Leu Thr Gln Leu Asp Leu Asn Arg Asn Arg Ile Arg
 210 215 220
 Leu Ile Glu Gly Leu Thr Phe Gln Gly Leu Asn Ser Leu Glu Val Leu

225					230					235				240
Lys	Leu	Gln	Arg	Asn	Asn	Ile	Ser	Lys	Leu	Thr	Asp	Gly	Ala	Phe
				245					250					255
Gly	Leu	Ser	Lys	Met	His	Val	Leu	His	Leu	Glu	Tyr	Asn	Ser	Leu
			260					265						270
Glu	Val	Asn	Ser	Gly	Ser	Leu	Tyr	Gly	Leu	Thr	Ala	Leu	His	Gln
		275					280					285		Leu
His	Leu	Ser	Asn	Asn	Ser	Ile	Ala	Arg	Ile	His	Arg	Lys	Gly	Trp
	290					295					300			Ser
Phe	Cys	Gln	Lys	Leu	His	Glu	Leu	Val	Leu	Ser	Phe	Asn	Asn	Leu
	305				310					315				Thr
Arg	Leu	Asp	Glu	Glu	Ser	Leu	Ala	Glu	Leu	Ser	Ser	Leu	Ser	Val
			325						330					Leu
Arg	Leu	Ser	His	Asn	Ser	Ile	Ser	His	Ile	Ala	Glu	Gly	Ala	Phe
			340					345						Lys
Gly	Leu	Arg	Ser	Leu	Arg	Val	Leu	Asp	Leu	Asp	His	Asn	Glu	Ile
	355						360							Ser
Gly	Thr	Ile	Glu	Asp	Thr	Ser	Gly	Ala	Phe	Ser	Gly	Leu	Asp	Ser
	370					375					380			Leu
Ser	Lys	Leu	Thr	Leu	Phe	Gly	Asn	Lys	Ile	Lys	Ser	Val	Ala	Lys
	385				390					395				Arg
Ala	Phe	Ser	Gly	Leu	Glu	Gly	Leu	Glu	His	Leu	Asn	Leu	Gly	Gly
			405						410					Asn
Ala	Ile	Arg	Ser	Val	Gln	Phe	Asp	Ala	Phe	Val	Lys	Met	Lys	Asn
			420					425						Leu
Lys	Glu	Leu	His	Ile	Ser	Ser	Asp	Ser	Phe	Leu	Cys	Asp	Cys	Gln
	435						440							Leu
Lys	Trp	Leu	Pro	Pro	Trp	Leu	Ile	Gly	Arg	Met	Leu	Gln	Ala	Phe
	450					455					460			Val
Thr	Ala	Thr	Cys	Ala	His	Pro	Glu	Ser	Leu	Lys	Gly	Gln	Ser	Ile
	465				470					475				Phe
Ser	Val	Pro	Pro	Glu	Ser	Phe	Val	Cys	Asp	Asp	Phe	Leu	Lys	Pro
				485					490					Gln
Ile	Ile	Thr	Gln	Pro	Glu	Thr	Thr	Met	Ala	Met	Val	Gly	Lys	Asp
			500					505						Ile
Arg	Phe	Thr	Cys	Ser	Ala	Ala	Ser	Ser	Ser	Ser	Ser	Pro	Met	Thr
	515						520					525		Phe
Ala	Trp	Lys	Lys	Asp	Asn	Glu	Val	Leu	Thr	Asn	Ala	Asp	Met	Glu
	530					535					540			Asn
Phe	Val	His	Val	His	Ala	Gln	Asp	Gly	Glu	Val	Met	Glu	Tyr	Thr
	545				550					555				Thr
Ile	Leu	His	Leu	Arg	Gln	Val	Thr	Phe	Gly	His	Glu	Gly	Arg	Tyr
				565					570					Gln
Cys	Val	Ile	Thr	Asn	His	Phe	Gly	Ser	Thr	Tyr	Ser	His	Lys	Ala
			580					585					590	Arg
Leu	Thr	Val	Asn	Val	Leu	Pro	Ser	Phe	Thr	Lys	Thr	Pro	His	Asp
	595						600					605		Ile
Thr	Ile	Arg	Thr	Thr	Thr	Met	Ala	Arg	Leu	Glu	Cys	Ala	Ala	Thr
	610					615						620		Gly
His	Pro	Asn	Pro	Gln	Ile	Ala	Trp	Gln	Lys	Asp	Gly	Gly	Thr	Asp
	625				630					635				Phe
Pro	Ala	Ala	Arg	Glu	Arg	Arg	Met	His	Val	Met	Pro	Asp	Asp	Asp
				645					650					Val
Phe	Phe	Ile	Thr	Asp	Val	Lys	Ile	Asp	Asp	Ala	Gly	Val	Tyr	Ser
			660					665					670	Cys
Thr	Ala	Gln	Asn	Ser	Ala	Gly	Ser	Ile	Ser	Ala	Asn	Ala	Thr	Leu
	675						680					685		Thr
Val	Leu	Glu	Thr	Pro	Ser	Leu	Val	Val	Pro	Leu	Glu	Asp	Arg	Val
	690					695					700			Val
Ser	Val	Gly	Glu	Thr	Val	Ala	Leu	Gln	Cys	Lys	Ala	Thr	Gly	Asn
	705				710					715				Pro
Pro	Pro	Arg	Ile	Thr	Trp	Phe	Lys	Gly	Asp	Arg	Pro	Leu	Ser	Leu
				725					730					Thr
Glu	Arg	His	His	Leu	Thr	Pro	Asp	Asn	Gln	Leu	Leu	Val	Val	Gln
			740					745						Asn
Val	Val	Ala	Glu	Asp	Ala	Gly	Arg	Tyr	Thr	Cys	Glu	Met	Ser	Asn
	755						760					765		Thr
Leu	Gly	Thr	Glu	Arg	Ala	His	Ser	Gln	Leu	Ser	Val	Leu	Pro	Ala
	770					775					780			Ala

Gly Cys Arg Lys Asp Gly Thr Thr Val Gly Ile Phe Thr Ile Ala Val
 785 790 795 800
 Val Ser Ser Ile Val Leu Thr Ser Leu Val Trp Val Cys Ile Ile Tyr
 805 810 815
 Gln Thr Arg Lys Lys Ser Glu Glu Tyr Ser Val Thr Asn Thr Asp Glu
 820 825 830
 Thr Val Val Pro Pro Asp Val Pro Ser Tyr Leu Ser Ser Gln Gly Thr
 835 840 845
 Leu Ser Asp Arg Gln Glu Thr Val Val Arg Thr Glu Gly Ala Gly Pro
 850 855 860
 Gln Ala Asn Gly His Ile Glu Ser Asn Gly Val Cys Pro Arg Asp Ala
 865 870 875 880
 Ser His Phe Pro Glu Pro Asp Thr His Ser Val Ala Cys Arg Gln Pro
 885 890 895
 Lys Leu Cys Ala Gly Ser Ala Tyr His Lys Glu Pro Trp Lys Ala Ile
 900 905 910
 Glu Lys Ala Glu Gly Thr Pro Gly Pro His Lys Met Glu His Gly Gly
 915 920 925
 Arg Val Val Cys Ser Asp Cys Asn Thr Glu Val Asp Cys Tyr Ser Arg
 930 935 940
 Gly Gln Ala Phe His Pro Gln Pro Val Ser Arg Asp Ser Ala Gln Pro
 945 950 955 960
 Ser Ala Pro Asn Gly Pro Glu Pro Gly Gly Ser Asp Gln Glu His Ser
 965 970 975
 Pro His His Gln Cys Ser Arg Thr Ala Ala Gly Ser Cys Pro Glu Cys
 980 985 990
 Gln Gly Ser Leu Tyr Pro Ser Asn His Asp Arg Met Leu Thr Ala Val
 995 1000 1005
 Lys Lys Lys Pro Met Ala Ser Leu Asp Gly Lys Gly Asp Ser Ser
 1010 1015 1020
 Trp Thr Leu Ala Arg Leu Tyr His Pro Asp Ser Thr Glu Leu Gln
 1025 1030 1035
 Pro Ala Ser Ser Leu Thr Ser Gly Ser Pro Glu Arg Ala Glu Ala
 1040 1045 1050
 Gln Tyr Leu Leu Val Ser Asn Gly His Leu Pro Lys Ala Cys Asp
 1055 1060 1065
 Ala Ser Pro Glu Ser Thr Pro Leu Thr Gly Gln Leu Pro Gly Lys
 1070 1075 1080
 Gln Arg Val Pro Leu Leu Leu Ala Pro Lys Ser
 1085 1090

<210> 255
 <211> 474
 <212> PRT
 <213> Homo sapiens
 <400> 255

Met Ala Thr Asn Trp Gly Ser Leu Leu Gln Asp Lys Gln Gln Leu Glu
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 Glu Leu Ala Arg Gln Ala Val Asp Arg Ala Leu Ala Glu Gly Val Leu
 20 25 30
 Leu Arg Thr Ser Gln Glu Pro Thr Ser Ser Glu Val Val Ser Tyr Ala
 35 40 45
 Pro Phe Thr Leu Phe Pro Ser Leu Val Pro Ser Ala Leu Leu Glu Gln
 50 55 60
 Ala Tyr Ala Val Gln Met Asp Phe Asn Leu Leu Val Asp Ala Val Ser
 65 70 75 80
 Gln Asn Ala Ala Phe Leu Glu Gln Thr Leu Ser Ser Thr Ile Lys Gln
 85 90 95
 Asp Asp Phe Thr Ala Arg Leu Phe Asp Ile His Lys Gln Val Leu Lys
 100 105 110
 Glu Gly Ile Ala Gln Thr Val Phe Leu Gly Leu Asn Arg Ser Asp Tyr
 115 120 125
 Met Phe Gln Arg Ser Ala Asp Gly Ser Pro Ala Leu Lys Gln Ile Glu
 130 135 140
 Ile Asn Thr Ile Ser Ala Ser Phe Gly Gly Leu Ala Ser Arg Thr Pro
 145 150 155 160
 Ala Val His Arg His Val Leu Ser Val Leu Ser Lys Thr Lys Glu Ala
 165 170 175
 Gly Lys Ile Leu Ser Asn Asn Pro Ser Lys Gly Leu Ala Leu Gly Ile

180
 Ala Lys Ala Trp Glu Leu Tyr Gly Ser Pro Asn Ala Leu Val Leu Leu
 195
 Ile Ala Gln Glu Lys Glu Arg Asn Ile Phe Asp Gln Arg Ala Ile Glu
 210
 Asn Glu Leu Leu Ala Arg Asn Ile His Val Ile Arg Arg Thr Phe Glu
 225
 Asp Ile Ser Glu Lys Gly Ser Leu Asp Gln Asp Arg Arg Leu Phe Val
 245
 Asp Gly Gln Glu Ile Ala Val Val Tyr Phe Arg Asp Gly Tyr Met Pro
 260
 Arg Gln Tyr Ser Leu Gln Asn Trp Glu Ala Arg Leu Leu Glu Arg
 275
 Ser His Ala Ala Lys Cys Pro Asp Ile Ala Thr Gln Leu Ala Gly Thr
 290
 Lys Lys Val Gln Gln Glu Ser Arg Pro Gly Met Leu Glu Met Leu
 305
 Leu Pro Gly Gln Pro Glu Ala Val Ala Arg Leu Arg Ala Thr Phe Ala
 325
 Gly Leu Tyr Ser Leu Asp Val Gly Glu Gly Asp Gln Ala Ile Ala
 340
 Glu Ala Leu Ala Ala Pro Ser Arg Phe Val Leu Lys Pro Gln Arg Glu
 355
 Gly Gly Gly Asn Asn Leu Tyr Gly Glu Glu Met Val Gln Ala Leu Lys
 370
 Gln Leu Lys Asp Ser Glu Glu Arg Ala Ser Tyr Ile Leu Met Glu Lys
 385
 Ile Glu Pro Glu Pro Phe Glu Asn Cys Leu Leu Arg Pro Gly Ser Pro
 405
 Ala Arg Val Val Gln Cys Ile Ser Glu Leu Gly Ile Phe Gly Val Tyr
 420
 Val Arg Gln Glu Lys Thr Leu Val Met Asn Lys His Val Gly His Leu
 435
 Leu Arg Thr Lys Ala Ile Glu His Ala Asp Gly Gly Val Ala Ala Gly
 450
 Val Ala Val Leu Asp Asn Pro Tyr Pro Val
 465
 470

<210> 256
 <211> 96
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 <213> Homo sapiens
 <400> 256

Met Trp Ile Tyr Ser Lys Leu Ser Lys Arg Thr Val Phe Arg Lys Gly
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 Lys Thr Arg Thr Gln Lys Thr Leu Gly Ile Thr Thr Thr Pro Lys Cys
 20 25 30
 Phe Arg Leu Gln Glu Ile Thr Ile His Val Phe Ala Gly Gly His Thr
 35 40 45
 Ile Phe Pro Tyr Tyr Leu Val Gln Asn Asp Ser Ser Leu Pro Lys Ser
 50 55 60
 Phe Phe Ser Asn His Asp Phe Pro Ile Tyr Phe Gly Pro Met Gln Ser
 65 70 75 80
 His Ser Leu Trp Pro Ile Val Ser Leu Pro Thr Thr Pro Leu Gly Gly
 85 90 95

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 <213> Homo sapiens
 <400> 257

Met Trp Pro Thr Arg Arg Leu Val Thr Ile Lys Arg Ser Gly Val Asp
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 Gly Pro His Phe Pro Leu Ser Leu Ser Thr Cys Leu Phe Gly Arg Gly
 20 25 30
 Ile Glu Cys Asp Ile Arg Ile Gln Leu Pro Val Val Ser Lys Gln His
 35 40 45
 Cys Lys Ile Glu Ile His Glu Gln Glu Ala Ile Leu His Asn Phe Ser
 50 55 60

Ser Thr Asn Pro Thr Gln Val Asn Gly Ser Val Ile Asp Glu Pro Val
 65 70 75 80
 Arg Leu Lys His Gly Asp Val Ile Thr Ile Ile Asp Arg Ser Phe Arg
 85 90 95
 Tyr Glu Asn Glu Ser Leu Gln Asn Gly Arg Lys Ser Thr Glu Phe Pro
 100 105 110
 Arg Lys Ile Arg Glu Gln Glu Pro Ala Arg Arg Val Ser Arg Ser Ser
 115 120 125
 Phe Ser Ser Asp Pro Asp Glu Lys Ala Gln Asp Ser Lys Ala Tyr Ser
 130 135 140
 Lys Ile Thr Glu Gly Lys Val Ser Gly Asn Pro Gln Val His Ile Lys
 145 150 155 160
 Asn Val Lys Glu Asp Ser Thr Ala Asp Asp Ser Lys Asp Ser Val Ala
 165 170 175
 Gln Gly Thr Thr Asn Val His Ser Ser Glu His Ala Gly Arg Asn Gly
 180 185 190
 Arg Asn Ala Ala Asp Pro Ile Ser Gly Asp Phe Lys Glu Ile Ser Ser
 195 200 205
 Val Lys Leu Val Ser Arg Tyr Gly Glu Leu Lys Ser Val Pro Thr Thr
 210 215 220
 Gln Cys Leu Asp Asn Ser Lys Lys Asn Glu Ser Pro Phe Trp Lys Leu
 225 230 235 240
 Tyr Glu Ser Val Lys Lys Glu Leu Asp Val Lys Ser Gln Lys Glu Asn
 245 250 255
 Val Leu Gln Tyr Cys Arg Lys Ser Gly Leu Gln Thr Asp Tyr Ala Thr
 260 265 270
 Glu Lys Glu Ser Ala Asp Gly Leu Gln Gly Glu Thr Gln Leu Leu Val
 275 280 285
 Ser Arg Lys Ser Arg Pro Lys Ser Gly Gly Ser Gly His Ala Val Ala
 290 295 300
 Glu Pro Ala Ser Pro Glu Gln Glu Leu Asp Gln Asn Lys Gly Lys Gly
 305 310 315 320
 Arg Asp Val Glu Ser Val Gln Thr Pro Ser Lys Ala Val Gly Ala Ser
 325 330 335
 Phe Pro Leu Tyr Glu Pro Ala Lys Met Lys Thr Pro Val Gln Tyr Ser
 340 345 350
 Gln Gln Gln Asn Ser Pro Gln Lys His Lys Asn Lys Asp Leu Tyr Thr
 355 360 365
 Thr Gly Arg Arg Glu Ser Val Asn Leu Gly Lys Ser Glu Gly Phe Lys
 370 375 380
 Ala Gly Asp Lys Thr Leu Thr Pro Arg Lys Leu Ser Thr Arg Asn Arg
 385 390 395 400
 Thr Pro Ala Lys Val Glu Asp Ala Ala Asp Ser Ala Thr Lys Pro Glu
 405 410 415
 Asn Leu Ser Ser Lys Thr Arg Gly Ser Ile Pro Thr Asp Val Glu Val
 420 425 430
 Leu Pro Thr Glu Thr Glu Ile His Asn Glu Pro Phe Leu Thr Leu Trp
 435 440 445
 Leu Thr Gln Val Glu Arg Lys Ile Gln Lys Asp Ser Leu Ser Lys Pro
 450 455 460
 Glu Lys Leu Gly Thr Thr Ala Gly Gln Met Cys Ser Gly Leu Pro Gly
 465 470 475 480
 Leu Ser Ser Val Asp Ile Asn Asn Phe Gly Asp Ser Ile Asn Glu Ser
 485 490 495
 Glu Gly Ile Pro Leu Lys Arg Arg Arg Val Ser Phe Gly Gly His Leu
 500 505 510
 Arg Pro Glu Leu Phe Asp Glu Asn Leu Pro Pro Asn Thr Pro Leu Lys
 515 520 525
 Arg Gly Glu Ala Pro Thr Lys Arg Lys Ser Leu Val Met His Thr Pro
 530 535 540
 Pro Val Leu Lys Lys Ile Ile Lys Glu Gln Pro Gln Pro Ser Gly Lys
 545 550 555 560
 Gln Glu Ser Gly Ser Glu Ile His Val Glu Val Lys Ala Gln Ser Leu
 565 570 575
 Val Ile Ser Pro Pro Ala Pro Ser Pro Arg Lys Thr Pro Val Ala Ser
 580 585 590
 Asp Gln Arg Arg Arg Ser Cys Lys Thr Ala Pro Ala Ser Ser Ser Lys
 595 600 605
 Ser Gln Thr Glu Val Pro Lys Arg Gly Gly Glu Arg Val Ala Thr Cys

610	615	620
Leu Gln Lys Arg Val Ser Ile Ser Arg Ser Gln His Asp Ile Leu Gln		
625	630	635
Met Ile Cys Ser Lys Arg Arg Ser Gly Ala Ser Glu Ala Asn Leu Ile		640
	645	650
Val Ala Lys Ser Trp Ala Asp Val Val Lys Leu Gly Ala Lys Gln Thr		655
	660	665
Gln Thr Lys Val Ile Lys His Gly Pro Gln Arg Ser Met Asn Lys Arg		670
	675	680
Gln Arg Arg Pro Ala Thr Pro Lys Lys Pro Val Gly Glu Val His Ser		685
	690	695
Gln Phe Ser Thr Gly His Ala Asn Ser Pro Cys Thr Ile Ile Ile Gly		700
705	710	715
Lys Ala His Thr Glu Lys Val His Val Pro Ala Arg Pro Tyr Arg Val		720
	725	730
Leu Asn Asn Phe Ile Ser Asn Gln Lys Met Asp Phe Lys Glu Asp Leu		735
	740	745
Ser Gly Ile Ala Glu Met Phe Lys Thr Pro Val Lys Glu Gln Pro Gln		750
	755	760
Leu Thr Ser Thr Cys His Ile Ala Ile Ser Asn Ser Glu Asn Leu Leu		765
	770	775
Gly Lys Gln Phe Gln Gly Thr Asp Ser Gly Glu Glu Pro Leu Leu Pro		780
785	790	795
Thr Ser Glu Ser Phe Gly Gly Asn Val Phe Phe Ser Ala Gln Asn Ala		800
	805	810
Ala Lys Gln Pro Ser Asp Lys Cys Ser Ala Ser Pro Pro Leu Arg Arg		815
	820	825
Gln Cys Ile Arg Glu Asn Gly Asn Val Ala Lys Thr Pro Arg Asn Thr		830
	835	840
Tyr Lys Met Thr Ser Leu Glu Thr Lys Thr Ser Asp Thr Glu Thr Glu		845
	850	855
Pro Ser Lys Thr Val Ser Thr Val Asn Arg Ser Gly Arg Ser Thr Glu		860
865	870	875
Phe Arg Asn Ile Gln Lys Leu Pro Val Glu Ser Lys Ser Glu Glu Thr		880
	885	890
Asn Thr Glu Ile Val Glu Cys Ile Leu Lys Arg Gly Gln Lys Ala Thr		895
	900	905
Leu Leu Gln Gln Arg Arg Glu Gly Glu Met Lys Glu Ile Glu Arg Pro		910
	915	920
Phe Glu Thr Tyr Lys Glu Asn Ile Glu Leu Lys Glu Asn Asp Glu Lys		925
	930	935
Met Lys Ala Met Lys Arg Ser Arg Thr Trp Gly Gln Lys Cys Ala Pro		940
945	950	955
Met Ser Asp Leu Thr Asp Leu Lys Ser Leu Pro Asp Thr Glu Leu Met		960
	965	970
Lys Asp Thr Ala Arg Gly Gln Asn Leu Leu Gln Thr Gln Asp His Ala		975
	980	985
Lys Ala Pro Lys Ser Glu Lys Gly Lys Ile Thr Lys Met Pro Cys Gln		990
	995	1000
Ser Leu Gln Pro Glu Pro Ile Asn Thr Pro Thr His Thr Lys Gln		1005
	1010	1015
Gln Leu Lys Ala Ser Leu Gly Lys Val Gly Val Lys Glu Glu Leu		1020
	1025	1030
Leu Ala Val Gly Lys Phe Thr Arg Thr Ser Gly Glu Thr Thr His		1035
	1040	1045
Thr His Arg Glu Pro Ala Gly Asp Gly Lys Ser Ile Arg Thr Phe		1050
	1055	1060
Lys Glu Ser Pro Lys Gln Ile Leu Asp Pro Ala Ala Arg Val Thr		1065
	1070	1075
Gly Met Lys Lys Trp Pro Arg Thr Pro Lys Glu Glu Ala Gln Ser		1080
	1085	1090
Leu Glu Asp Leu Ala Gly Phe Lys Glu Leu Phe Gln Thr Pro Gly		1095
	1100	1105
Pro Ser Glu Glu Ser Met Thr Asp Glu Lys Thr Thr Lys Ile Ala		1110
	1115	1120
Cys Lys Ser Pro Pro Pro Glu Ser Val Asp Thr Pro Thr Ser Thr		1125
	1130	1135
Lys Gln Trp Pro Lys Arg Ser Leu Arg Lys Ala Asp Val Glu Glu		1140
	1145	1150
		1155

Glu	Phe	Leu	Ala	Leu	Arg	Lys	Leu	Thr	Pro	Ser	Ala	Gly	Lys	Ala
1160						1165					1170			
Met	Leu	Thr	Pro	Lys	Pro	Ala	Gly	Gly	Asp	Glu	Lys	Asp	Ile	Lys
1175						1180					1185			
Ala	Phe	Met	Gly	Thr	Pro	Val	Gln	Lys	Leu	Asp	Leu	Ala	Gly	Thr
1190						1195					1200			
Leu	Pro	Gly	Ser	Lys	Arg	Gln	Leu	Gln	Thr	Pro	Lys	Glu	Lys	Ala
1205						1210					1215			
Gln	Ala	Leu	Glu	Asp	Leu	Ala	Gly	Phe	Lys	Glu	Leu	Phe	Gln	Thr
1220						1225					1230			
Pro	Gly	His	Thr	Glu	Glu	Leu	Val	Ala	Ala	Gly	Lys	Thr	Thr	Lys
1235						1240					1245			
Ile	Pro	Cys	Asp	Ser	Pro	Gln	Ser	Asp	Pro	Val	Asp	Thr	Pro	Thr
1250						1255					1260			
Ser	Thr	Lys	Gln	Arg	Pro	Lys	Arg	Ser	Ile	Arg	Lys	Ala	Asp	Val
1265						1270					1275			
Glu	Gly	Glu	Leu	Leu	Ala	Cys	Arg	Asn	Leu	Met	Pro	Ser	Ala	Gly
1280						1285					1290			
Lys	Ala	Met	His	Thr	Pro	Lys	Pro	Ser	Val	Gly	Glu	Glu	Lys	Asp
1295						1300					1305			
Ile	Ile	Ile	Phe	Val	Gly	Thr	Pro	Val	Gln	Lys	Leu	Asp	Leu	Thr
1310						1315					1320			
Glu	Asn	Leu	Thr	Gly	Ser	Lys	Arg	Arg	Pro	Gln	Thr	Pro	Lys	Glu
1325						1330					1335			
Glu	Ala	Gln	Ala	Leu	Glu	Asp	Leu	Thr	Gly	Phe	Lys	Glu	Leu	Phe
1340						1345					1350			
Gln	Thr	Pro	Gly	His	Thr	Glu	Glu	Ala	Val	Ala	Ala	Gly	Lys	Thr
1355						1360					1365			
Thr	Lys	Met	Pro	Cys	Glu	Ser	Ser	Pro	Pro	Glu	Ser	Ala	Asp	Thr
1370						1375					1380			
Pro	Thr	Ser	Thr	Arg	Arg	Gln	Pro	Lys	Thr	Pro	Leu	Glu	Lys	Arg
1385						1390					1395			
Asp	Val	Gln	Lys	Glu	Leu	Ser	Ala	Leu	Lys	Lys	Leu	Thr	Gln	Thr
1400						1405					1410			
Ser	Gly	Glu	Thr	Thr	His	Thr	Asp	Lys	Val	Pro	Gly	Gly	Glu	Asp
1415						1420					1425			
Lys	Ser	Ile	Asn	Ala	Phe	Arg	Glu	Thr	Ala	Lys	Gln	Lys	Leu	Asp
1430						1435					1440			
Pro	Ala	Ala	Ser	Val	Thr	Gly	Ser	Lys	Arg	His	Pro	Lys	Thr	Lys
1445						1450					1455			
Glu	Lys	Ala	Gln	Pro	Leu	Glu	Asp	Leu	Ala	Gly	Trp	Lys	Glu	Leu
1460						1465					1470			
Phe	Gln	Thr	Pro	Val	Cys	Thr	Asp	Lys	Pro	Thr	Thr	His	Glu	Lys
1475						1480					1485			
Thr	Thr	Lys	Ile	Ala	Cys	Arg	Ser	Gln	Pro	Asp	Pro	Val	Asp	Thr
1490						1495					1500			
Pro	Thr	Ser	Ser	Lys	Pro	Gln	Ser	Lys	Arg	Ser	Leu	Arg	Lys	Val
1505						1510					1515			
Asp	Val	Glu	Glu	Glu	Phe	Phe	Ala	Leu	Arg	Lys	Arg	Thr	Pro	Ser
1520						1525					1530			
Ala	Gly	Lys	Ala	Met	His	Thr	Pro	Lys	Pro	Ala	Val	Ser	Gly	Glu
1535						1540					1545			
Lys	Asn	Ile	Tyr	Ala	Phe	Met	Gly	Thr	Pro	Val	Gln	Lys	Leu	Asp
1550						1555					1560			
Leu	Thr	Glu	Asn	Leu	Thr	Gly	Ser	Lys	Arg	Arg	Leu	Gln	Thr	Pro
1565						1570					1575			
Lys	Glu	Lys	Ala	Gln	Ala	Leu	Glu	Asp	Leu	Ala	Gly	Phe	Lys	Glu
1580						1585					1590			
Leu	Phe	Gln	Thr	Arg	Gly	His	Thr	Glu	Glu	Ser	Met	Thr	Asn	Asp
1595						1600					1605			
Lys	Thr	Ala	Lys	Val	Ala	Cys	Lys	Ser	Ser	Gln	Pro	Asp	Leu	Asp
1610						1615					1620			
Lys	Asn	Pro	Ala	Ser	Ser	Lys	Arg	Arg	Leu	Lys	Thr	Ser	Leu	Gly
1625						1630					1635			
Lys	Val	Gly	Val	Lys	Glu	Glu	Leu	Leu	Ala	Val	Gly	Lys	Leu	Thr
1640						1645					1650			
Gln	Thr	Ser	Gly	Glu	Thr	Thr	His	Thr	His	Thr	Glu	Pro	Thr	Gly
1655						1660					1665			
Asp	Gly	Lys	Ser	Met	Lys	Ala	Phe	Met	Glu	Ser	Pro	Lys	Gln	Ile

1670	Leu Asp Ser Ala Ala Ser	1675	Leu Thr Gly Ser Lys	1680	Arg Gln Leu Arg
1685	Thr Pro Lys Gly Lys Ser	1690	Glu Val Pro Glu Asp	1695	Leu Ala Gly Phe
1700	Ile Glu Leu Phe Gln Thr	1705	Pro Ser His Thr Lys	1710	Glu Ser Met Thr
1715	Asn Glu Lys Thr Thr Lys	1720	Val Ser Tyr Arg Ala	1725	Ser Gln Pro Asp
1730	Leu Val Asp Thr Pro Thr	1735	Ser Lys Pro Gln Pro	1740	Lys Arg Ser
1745	Leu Arg Lys Ala Asp Thr	1750	Glu Glu Phe Leu Ala	1755	Phe Arg Lys
1760	Gln Thr Pro Ser Ala Gly	1765	Lys Ala Met His Thr	1770	Pro Lys Pro Ala
1775	Val Gly Glu Glu Lys Asp	1780	Ile Asn Thr Phe Leu	1785	Gly Thr Pro Val
1790	Gln Lys Leu Asp Gln Pro	1795	Gly Asn Leu Pro Gly	1800	Ser Asn Arg Arg
1805	Leu Gln Thr Arg Lys Glu	1810	Lys Ala Gln Ala Leu	1815	Glu Leu Thr
1820	Gly Phe Arg Glu Leu Phe	1825	Gln Thr Pro Cys Thr	1830	Asp Asn Pro Thr
1835	Ala Asp Glu Lys Thr Thr	1840	Lys Lys Ile Leu Cys	1845	Lys Ser Pro Gln
1850	Ser Asp Pro Ala Asp Thr	1855	Pro Thr Asn Thr Lys	1860	Gln Arg Pro Lys
1865	Arg Ser Leu Lys Lys Ala	1870	Asp Val Glu Glu Glu	1875	Phe Leu Ala Phe
1880	Arg Lys Leu Thr Pro Ser	1885	Ala Gly Lys Ala Met	1890	His Thr Pro Lys
1895	Ala Ala Val Gly Glu Glu	1900	Lys Asp Ile Asn Thr	1905	Phe Val Gly Thr
1910	Pro Val Glu Lys Leu Asp	1915	Leu Leu Gly Asn Leu	1920	Pro Gly Ser Lys
1925	Arg Arg Pro Gln Thr Pro	1930	Lys Glu Lys Ala Lys	1935	Ala Leu Glu Asp
1940	Leu Ala Gly Phe Lys Glu	1945	Leu Phe Gln Thr Pro	1950	Gly His Thr Glu
1955	Glu Ser Met Thr Asp Asp	1960	Lys Ile Thr Glu Val	1965	Ser Cys Lys Ser
1970	Pro Gln Pro Asp Pro Val	1975	Lys Thr Pro Thr Ser	1980	Ser Lys Gln Arg
1985	Leu Lys Ile Ser Leu Gly	1990	Lys Val Gly Val Lys	1995	Glu Glu Val Leu
2000	Pro Val Gly Lys Leu Thr	2005	Gln Thr Ser Gly Lys	2010	Thr Thr Gln Thr
2015	His Arg Glu Thr Ala Gly	2020	Asp Gly Lys Ser Ile	2025	Lys Ala Phe Lys
2030	Glu Ser Ala Lys Gln Met	2035	Leu Asp Pro Ala Asn	2040	Tyr Gly Thr Gly
2045	Met Glu Arg Trp Pro Arg	2050	Thr Pro Lys Glu Glu	2055	Ala Gln Ser Leu
2060	Glu Asp Leu Ala Gly Phe	2065	Lys Glu Leu Phe Gln	2070	Thr Pro Asp His
2075	Thr Glu Glu Ser Thr Thr	2080	Asp Asp Lys Thr Thr	2085	Lys Ile Ala Cys
2090	Lys Ser Pro Pro Pro Glu	2095	Ser Met Asp Thr Pro	2100	Thr Ser Thr Arg
2105	Arg Arg Pro Lys Thr Pro	2110	Leu Gly Lys Arg Asp	2115	Ile Val Glu Glu
2120	Leu Ser Ala Leu Lys Gln	2125	Leu Thr Gln Thr Thr	2130	His Thr Asp Lys
2135	Val Pro Gly Asp Glu Asp	2140	Lys Gly Ile Asn Val	2145	Phe Arg Glu Thr
2150	Ala Lys Gln Lys Leu Asp	2155	Pro Ala Ala Ser Val	2160	Thr Gly Ser Lys
2165	Arg Gln Pro Arg Thr Pro	2170	Lys Gly Lys Ala Gln	2175	Pro Leu Glu Asp
2180		2185		2190	

Leu	Ala	Gly	Leu	Lys	Glu	Leu	Phe	Gln	Thr	Pro	Val	Cys	Thr	Asp
2195						2200						2205		
Lys	Pro	Thr	Thr	His	Glu	Lys	Thr	Thr	Lys	Ile	Ala	Cys	Arg	Ser
2210						2215						2220		
Pro	Gln	Pro	Asp	Pro	Val	Gly	Thr	Pro	Thr	Ile	Phe	Lys	Pro	Gln
2225						2230						2235		
Ser	Lys	Arg	Ser	Leu	Arg	Lys	Ala	Asp	Val	Glu	Glu	Glu	Ser	Leu
2240						2245						2250		
Ala	Leu	Arg	Lys	Arg	Thr	Pro	Ser	Val	Gly	Lys	Ala	Met	Asp	Thr
2255						2260						2265		
Pro	Lys	Pro	Ala	Gly	Gly	Asp	Glu	Lys	Asp	Met	Lys	Ala	Phe	Met
2270						2275						2280		
Gly	Thr	Pro	Val	Gln	Lys	Leu	Asp	Leu	Pro	Gly	Asn	Leu	Pro	Gly
2285						2290						2295		
Ser	Lys	Arg	Trp	Pro	Gln	Thr	Pro	Lys	Glu	Lys	Ala	Gln	Ala	Leu
2300						2305						2310		
Glu	Asp	Leu	Ala	Gly	Phe	Lys	Glu	Leu	Phe	Gln	Thr	Pro	Gly	Thr
2315						2320						2325		
Asp	Lys	Pro	Thr	Thr	Asp	Glu	Lys	Thr	Thr	Lys	Ile	Ala	Cys	Lys
2330						2335						2340		
Ser	Pro	Gln	Pro	Asp	Pro	Val	Asp	Thr	Pro	Ala	Ser	Thr	Lys	Gln
2345						2350						2355		
Arg	Pro	Lys	Arg	Asn	Leu	Arg	Lys	Ala	Asp	Val	Glu	Glu	Glu	Phe
2360						2365						2370		
Leu	Ala	Leu	Arg	Lys	Arg	Thr	Pro	Ser	Ala	Gly	Lys	Ala	Met	Asp
2375						2380						2385		
Thr	Pro	Lys	Pro	Ala	Val	Ser	Asp	Glu	Lys	Asn	Ile	Asn	Thr	Phe
2390						2395						2400		
Val	Glu	Thr	Pro	Val	Gln	Lys	Leu	Asp	Leu	Leu	Gly	Asn	Leu	Pro
2405						2410						2415		
Gly	Ser	Lys	Arg	Gln	Pro	Gln	Thr	Pro	Lys	Glu	Lys	Ala	Glu	Ala
2420						2425						2430		
Leu	Glu	Asp	Leu	Val	Gly	Phe	Lys	Glu	Leu	Phe	Gln	Thr	Pro	Gly
2435						2440						2445		
His	Thr	Glu	Glu	Ser	Met	Thr	Asp	Asp	Lys	Ile	Thr	Glu	Val	Ser
2450						2455						2460		
Cys	Lys	Ser	Pro	Gln	Pro	Glu	Ser	Phe	Lys	Thr	Ser	Arg	Ser	Ser
2465						2470						2475		
Lys	Gln	Arg	Leu	Lys	Ile	Pro	Leu	Val	Lys	Val	Asp	Met	Lys	Glu
2480						2485						2490		
Glu	Pro	Leu	Ala	Val	Ser	Lys	Leu	Thr	Arg	Thr	Ser	Gly	Glu	Thr
2495						2500						2505		
Thr	Gln	Thr	His	Thr	Glu	Pro	Thr	Gly	Asp	Ser	Lys	Ser	Ile	Lys
2510						2515						2520		
Ala	Phe	Lys	Glu	Ser	Pro	Lys	Gln	Ile	Leu	Asp	Pro	Ala	Ala	Ser
2525						2530						2535		
Val	Thr	Gly	Ser	Arg	Arg	Gln	Leu	Arg	Thr	Arg	Lys	Glu	Lys	Ala
2540						2545						2550		
Arg	Ala	Leu	Glu	Asp	Leu	Val	Asp	Phe	Lys	Glu	Leu	Phe	Ser	Ala
2555						2560						2565		
Pro	Gly	His	Thr	Glu	Glu	Ser	Met	Thr	Ile	Asp	Lys	Asn	Thr	Lys
2570						2575						2580		
Ile	Pro	Cys	Lys	Ser	Pro	Pro	Pro	Glu	Leu	Thr	Asp	Thr	Ala	Thr
2585						2590						2595		
Ser	Thr	Lys	Arg	Cys	Pro	Lys	Thr	Arg	Pro	Arg	Lys	Glu	Val	Lys
2600						2605						2610		
Glu	Glu	Leu	Ser	Ala	Val	Glu	Arg	Leu	Thr	Gln	Thr	Ser	Gly	Gln
2615						2620						2625		
Ser	Thr	His	Thr	His	Lys	Glu	Pro	Ala	Ser	Gly	Asp	Glu	Gly	Ile
2630						2635						2640		
Lys	Val	Leu	Lys	Gln	Arg	Ala	Lys	Lys	Lys	Pro	Asn	Pro	Val	Glu
2645						2650						2655		
Glu	Glu	Pro	Ser	Arg	Arg	Arg	Pro	Arg	Ala	Pro	Lys	Glu	Lys	Ala
2660						2665						2670		
Gln	Pro	Leu	Glu	Asp	Leu	Ala	Gly	Phe	Thr	Glu	Leu	Ser	Glu	Thr
2675						2680						2685		
Ser	Gly	His	Thr	Gln	Glu	Ser	Leu	Thr	Ala	Gly	Lys	Ala	Thr	Lys
2690						2695						2700		
Ile	Pro	Cys	Glu	Ser	Pro	Pro	Leu	Glu	Val	Val	Asp	Thr	Thr	Ala

2705	Ser Thr Lys Arg His Leu	2710	Arg Thr Arg Val Gln	2715	Lys Val Gln Val
2720	Lys Glu Glu Pro Ser Ala	2725	Lys Phe Thr Gln	2730	Thr Ser Gly Glu
2735	Thr Thr Asp Ala Asp Lys	2740	Pro Ala Gly Glu	2745	Asp Lys Gly Ile
2750	Lys Ala Leu Lys Glu Ser	2755	Lys Gln Thr Pro	2760	Ala Pro Ala Ala
2765	Ser Val Thr Gly Ser Arg	2770	Arg Pro Arg Ala	2775	Pro Arg Glu Ser
2780	Ala Gln Ala Ile Glu Asp	2785	Ala Gly Phe Lys	2790	Asp Pro Ala Ala
2795	Gly His Thr Glu Glu Ser	2800	Thr Asp Asp Lys	2805	Thr Thr Lys Ile
2810	Pro Cys Lys Ser Ser Pro	2815	Leu Glu Asp Thr	2820	Ala Thr Ser Ser
2825	Lys Arg Arg Pro Arg Thr	2830	Ala Gln Lys Val	2835	Glu Val Lys Glu
2840	Glu Leu Leu Ala Val Gly	2845	Leu Thr Gln Thr	2850	Ser Gly Glu Thr
2855	Thr His Thr Asp Lys Glu	2860	Val Gly Glu Gly	2865	Lys Gly Thr Lys
2870	Ala Phe Lys Gln Pro Ala	2875	Arg Asn Val Asp	2880	Ala Glu Asp Val
2885	Ile Gly Ser Arg Arg Gln	2890	Arg Ala Pro Lys	2895	Glu Lys Ala Gln
2900	Pro Leu Glu Asp Leu Ala	2905	Phe Gln Glu Leu	2910	Ser Gln Thr Pro
2915	Gly His Thr Glu Glu Leu	2920	Asn Gly Ala Ala	2925	Asp Ser Phe Thr
2930	Ser Ala Pro Lys Gln Thr	2935	Pro Asp Ser Gly Lys	2940	Pro Leu Lys Ile
2945	Ser Arg Arg Val Leu Arg	2950	Ala Pro Lys Val Glu	2955	Pro Val Gly Asp
2960	Val Val Ser Thr Arg Asp	2965	Pro Val Lys Ser Gln	2970	Ser Lys Ser Asn
2975	Thr Ser Leu Pro Pro Leu	2980	Pro Phe Lys Arg Gly	2985	Gly Gly Lys Asp
2990	Gly Ser Val Thr Gly Thr	2995	Lys Arg Leu Arg Cys	3000	Met Pro Ala Pro
3005	Glu Glu Ile Val Glu Glu	3010	Leu Pro Ala Ser Lys	3015	Lys Gln Arg Val
3020	Ala Pro Arg Ala Arg Gly	3025	Lys Ser Ser Glu Pro	3030	Val Val Ile Met
3035	Lys Arg Ser Leu Arg Thr	3040	Ser Ala Lys Arg Ile	3045	Glu Pro Ala Glu
3050	Glu Leu Asn Ser Asn Asp	3055	Met Lys Thr Asn Lys	3060	Glu Glu His Lys
3065	Leu Gln Asp Ser Val Pro	3070	Glu Asn Lys Gly Ile	3075	Ser Leu Arg Ser
3080	Arg Arg Gln Asp Lys Thr	3085	Glu Ala Glu Gln Gln	3090	Ile Thr Glu Val
3095	Phe Val Leu Ala Glu Arg	3100	Ile Glu Ile Asn Arg	3105	Asn Glu Lys Lys
3110	Pro Met Lys Thr Ser Pro	3115	Glu Met Asp Ile Gln	3120	Asn Pro Asp Asp
3125	Gly Ala Arg Lys Pro Ile	3130	Pro Arg Asp Lys Val	3135	Thr Glu Asn Lys
3140	Arg Cys Leu Arg Ser Ala	3145	Arg Gln Asn Glu Ser	3150	Ser Gln Pro Lys
3155	Val Ala Glu Glu Ser Gly	3160	Gly Gln Lys Ser Ala	3165	Lys Val Leu Met
3170	Gln Asn Gln Lys Gly Lys	3175	Gly Glu Ala Gly Asn	3180	Ser Asp Ser Met
3185	Cys Leu Arg Ser Arg Lys	3190	Thr Lys Ser Gln Pro	3195	Ala Ala Ser Thr
3200	Leu Glu Ser Lys Ser Val	3205	Gln Arg Val Thr Arg	3210	Ser Val Lys Arg
3215		3220		3225	

Cys Ala Glu Asn Pro Lys Lys Ala Glu Asp Asn Val Cys Val Lys
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 Lys Ile Thr Thr Arg Ser His Arg Asp Ser Glu Asp Ile
 3245 3250 3255

<210> 258
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 <212> PRT
 <213> Homo sapiens
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Met Ser Glu Val Arg Pro Leu Ser Arg Asp Ile Leu Met Glu Thr Leu
 1 5 10 15
 Leu Tyr Glu Gln Leu Leu Glu Pro Pro Thr Met Glu Val Leu Gly Met
 20 25 30
 Thr Asp Ser Glu Glu Asp Leu Asp Pro Met Glu Asp Phe Asp Ser Leu
 35 40 45
 Glu Cys Met Glu Gly Ser Asp Ala Leu Ala Leu Arg Leu Ala Cys Ile
 50 55 60
 Gly Asp Glu Met Asp Val Ser Leu Arg Ala Pro Arg Leu Ala Gln Leu
 65 70 75 80
 Ser Glu Val Ala Met His Ser Leu Gly Leu Ala Phe Ile Tyr Asp Gln
 85 90 95
 Thr Glu Asp Ile Arg Asp Val Leu Arg Ser Phe Met Asp Gly Phe Thr
 100 105 110
 Thr Leu Lys Glu Asn Ile Met Arg Phe Trp Arg Ser Pro Asn Pro Gly
 115 120 125
 Ser Trp Val Ser Cys Glu Gln Val Leu Leu Ala Leu Leu Leu Leu Leu
 130 135 140
 Ala Leu Leu Leu Pro Leu Leu Ser Gly Gly Leu His Leu Leu Leu Lys
 145 150 155 160

<210> 259
 <211> 1844
 <212> PRT
 <213> Homo sapiens
 <400> 259

Met Thr Thr Arg Phe Thr Asp Glu Leu Met Glu Gln Gly Leu Thr Tyr
 1 5 10 15
 Lys Val Leu Thr Leu Val Ser Gln Ile Asp Val Asn Asn Glu Phe Glu
 20 25 30
 Lys Leu Gln Arg Glu Arg Gly Leu Gly Ser Glu Lys His Arg Lys Glu
 35 40 45
 Val Ser Asp Leu Ile Lys Glu Cys Arg Gln Ser Leu Ala Glu Ser Leu
 50 55 60
 Phe Ala Trp Ala Cys Gln Ser Pro Leu Gly Lys Glu Asp Thr Leu Leu
 65 70 75 80
 Leu Ile Gly His Leu Glu Arg Val Thr Val Glu Ala Asn Gly Ser Leu
 85 90 95
 Asp Ala Val Asn Leu Ala Leu Leu Met Ala Leu Leu Tyr Cys Phe Asp
 100 105 110
 Ile Ser Phe Ile Glu Gln Ser Thr Glu Glu Arg Asp Asp Met Ile His
 115 120 125
 Gln Leu Pro Leu Leu Thr Glu Lys Gln Tyr Ile Ala Thr Ile His Ser
 130 135 140
 Arg Leu Gln Asp Ser Gln Leu Trp Lys Leu Pro Gly Leu Gln Ala Thr
 145 150 155 160
 Val Arg Leu Ala Trp Ala Leu Ala Leu Arg Gly Ile Ser Gln Leu Pro
 165 170 175
 Asp Val Thr Ala Leu Ala Glu Phe Thr Glu Ala Asp Glu Ala Met Ala
 180 185 190
 Glu Leu Ala Ile Ala Asp Asn Val Phe Leu Phe Leu Met Glu Ser Val
 195 200 205
 Val Val Ser Glu Tyr Phe Tyr Gln Glu Glu Phe Tyr Ile Arg Arg Val
 210 215 220
 His Asn Leu Ile Thr Asp Phe Leu Ala Leu Met Pro Met Lys Val Lys
 225 230 235 240
 Gln Leu Arg Asn Arg Ala Asp Glu Asp Ala Arg Met Ile His Met Ser
 245 250 255
 Met Gln Met Gly Asn Glu Pro Pro Ile Ser Leu Arg Arg Asp Leu Glu

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Ile His Ile Leu Asn Leu Leu Ile Thr Ser Leu Glu Cys Asn Pro Pro
 820 825 830
 Asn Leu Ala Leu Tyr Leu Leu Gly Phe Glu Leu Lys Lys Pro Val Ser
 835 840 845
 Thr Thr Asn Leu Gln Asp Pro Gly Val Leu Gly Cys Pro Arg Thr Cys
 850 855 860
 Leu His Ala Ile Leu Asn Ile Leu Glu Lys Gly Thr Glu Gly Arg Thr
 865 870 875 880
 Gly Pro Val Ala Val Arg Glu Ser Pro Gln Leu Ala Glu Leu Cys Tyr
 885 890 895
 Gln Val Ile Tyr Gln Leu Cys Ala Cys Ser Asp Thr Ser Gly Pro Thr
 900 905 910
 Met Arg Tyr Leu Arg Thr Ser Gln Asp Phe Leu Phe Ser Gln Leu Gln
 915 920 925
 Tyr Leu Pro Phe Ser Asn Lys Glu Tyr Glu Ile Ser Met Leu Asn Gln
 930 935 940
 Met Ser Trp Leu Met Lys Thr Ala Ser Ile Glu Leu Arg Val Thr Ser
 945 950 955 960
 Leu Asn Arg Gln Arg Ser His Thr Gln Arg Leu Leu His Leu Leu
 965 970 975
 Asp Asp Met Pro Val Lys Pro Tyr Ser Asp Gly Glu Gly Gly Ile Glu
 980 985 990
 Asp Glu Asn Arg Ser Val Ser Gly Phe Leu His Phe Asp Thr Ala Thr
 995 1000 1005
 Lys Val Arg Arg Lys Ile Leu Asn Ile Leu Asp Ser Ile Asp Phe
 1010 1015 1020
 Ser Gln Glu Ile Pro Glu Pro Leu Gln Leu Asp Phe Phe Asp Arg
 1025 1030 1035
 Ala Gln Ile Glu Gln Val Ile Ala Asn Cys Glu His Lys Asn Leu
 1040 1045 1050
 Arg Gly Gln Thr Val Cys Asn Val Lys Leu Leu His Arg Val Leu
 1055 1060 1065
 Val Ala Glu Val Asn Ala Leu Gln Gly Met Ala Ala Ile Gly Gln
 1070 1075 1080
 Arg Pro Leu Leu Met Glu Glu Ile Ser Thr Val Leu Gln Tyr Val
 1085 1090 1095
 Val Gly Arg Asn Lys Leu Leu Gln Cys Leu His Ala Lys Arg His
 1100 1105 1110
 Ala Leu Glu Ser Trp Arg Gln Leu Val Glu Ile Ile Leu Thr Ala
 1115 1120 1125
 Cys Pro Gln Asp Leu Ile Gln Ala Glu Asp Arg Gln Leu Ile Ile
 1130 1135 1140
 Arg Asp Ile Leu Gln Asp Val His Asp Lys Ile Leu Asp Asp Glu
 1145 1150 1155
 Ala Ala Gln Glu Leu Met Pro Val Val Ala Gly Ala Val Phe Thr
 1160 1165 1170
 Leu Thr Ala His Leu Ser Gln Ala Val Leu Thr Glu Gln Lys Glu
 1175 1180 1185
 Thr Ser Val Leu Gly Pro Ala Glu Ala His Tyr Ala Phe Met Leu
 1190 1195 1200
 Asp Ser Cys Phe Thr Ser Pro Pro Pro Glu Glu Asn Pro Leu Val
 1205 1210 1215
 Gly Phe Ala Ser Ile Gly Asp Ser Ser Leu Tyr Ile Ile Leu Lys
 1220 1225 1230
 Lys Leu Leu Asp Phe Ile Leu Lys Thr Gly Gly Gly Phe Gln Arg
 1235 1240 1245
 Val Arg Thr His Leu Tyr Gly Ser Leu Leu Tyr Tyr Leu Gln Ile
 1250 1255 1260
 Ala Gln Arg Pro Asp Glu Pro Asp Thr Leu Glu Ala Ala Lys Lys
 1265 1270 1275
 Thr Met Trp Glu Arg Leu Thr Ala Pro Glu Asp Val Phe Ser Lys
 1280 1285 1290
 Leu Gln Arg Glu Asn Ile Ala Ile Ile Glu Ser Tyr Gly Ala Ala
 1295 1300 1305
 Leu Met Glu Val Val Cys Arg Asp Ala Cys Asp Gly His Glu Ile
 1310 1315 1320
 Gly Arg Met Leu Ala Leu Ala Leu Leu Asp Arg Ile Val Ser Val
 1325 1330 1335
 Asp Lys Gln Gln Gln Trp Leu Leu Tyr Leu Ser Asn Ser Gly Tyr

1340	Leu Lys Val Leu Val Asp	1345	Leu Val Glu Asp	1350	Asp Arg Thr Leu
1355	Gln Ser Leu Leu Thr Pro	1360	Pro Pro Leu Leu Lys	1365	Ala Leu Tyr
1370	Thr Tyr Glu Ser Lys Met	1375	Phe Leu Thr Arg Val	1380	Ala Lys Ile
1385	Gln Gln Gly Ala Leu Glu	1390	Leu Arg Ser Gly Val	1395	Ile Val Arg
1400	Leu Ala Gln Cys Gln Val	1405	Asp Met Arg Pro Glu	1410	Thr Asp Pro
1415	Gln Ser Met Phe Gly Met	1420	Asp Pro Pro Met Phe	1425	Ile Pro Thr
1430	Pro Val Asp Arg Tyr Arg	1435	Ile Leu Leu Pro Ala	1440	Leu Gln Leu
1445	Cys Gln Val Ile Leu Thr	1450	Ser Met Ala Gln His	1455	Leu Gln Ala
1460	Ala Gly Gln Val Leu Gln	1465	Leu Ile Ser His Ser	1470	Asp Thr Ile
1475	Gln Ala Ile Leu Arg Cys	1480	Asp Val Ser Ala Gly	1485	Ser Leu Gln
1490	Glu Leu Ala Leu Leu Thr	1495	Ile Ile Ser Lys Ala	1500	Ala Leu Pro
1505	Gly Ile Leu Ser Glu Leu	1510	Val Asp Val Asn Glu	1515	Gly Ser Leu
1520	Met Glu Leu Gln Gly His	1525	Gly Arg Phe Gln Arg	1530	Gln Cys Leu
1535	Gly Leu Leu Ser Arg Phe	1540	Gly Ser Asp Arg Leu	1545	Arg Gln Phe
1550	Lys Phe Gln Asp Asp Asn	1555	Glu Gly Asp Lys Val	1560	Ser Lys Lys
1565	Asp Glu Ile Glu Leu Ala	1570	Gln Gln Ile Cys Ala	1575	Asn Val Met
1580	Glu Tyr Cys Gln Ser Leu	1585	Leu Gln Ser Ser Pro	1590	Thr Phe Gln
1595	His Ala Val Cys Leu Phe	1600	Pro Ser Leu Ser Glu	1605	Thr Val Asn
1610	Arg Asp Gly Pro Arg Gln	1615	Thr Gln Ala Pro Val	1620	Val Pro Tyr
1625	Trp Arg Leu Pro Gly Leu	1630	Ile Ile Ile Tyr Leu	1635	Leu Lys Gln
1640	Ser Ala Asn Asp Phe Phe	1645	Tyr Tyr Asp Ser His	1650	Arg Gln Ser
1655	Val Ser Lys Leu Gln Asn	1660	Glu Gln Leu Pro Pro	1665	Asp Glu Ile
1670	Lys Glu Leu Cys Gln Ser	1675	Met Pro Ala Gly Val	1680	Asp Lys Ile
1685	Ser Thr Ala Gln Lys Tyr	1690	Leu Ala Arg Arg Arg	1695	Leu Val Lys
1700	Val Ile Asn Asn Arg Ala	1705	Leu Leu Ser Leu Cys	1710	Ser Phe Ile
1715	Ile Glu Thr Cys Leu Phe	1720	Leu Trp Arg His Leu	1725	Glu Tyr Tyr
1730	Leu Leu His Cys Met Pro	1735	Asp Ser Gln Asp Ser	1740	Leu Phe Ala
1745	Ser Arg Thr Leu Phe Lys	1750	Arg Arg Leu Gln Asp	1755	Ser Phe Ala
1760	Ser Glu Thr Asn Leu Asp	1765	Arg Ser Gly Leu Ala	1770	Ile Val Ser
1775	Gln His Asp Leu Asp Gln	1780	Gln Ala Asp Ala Ile	1785	Asn Ala Phe
1790	Gly Glu Ser Leu Gln Lys	1795	Leu Leu Asp Ile Glu	1800	Gly Leu Tyr
1805	Ser Lys Val Arg Ser Arg	1810	Ser Phe Ile Gln Ala	1815	Leu Val Arg
1820	Arg Ile Arg Gly Leu Leu	1825	Ile Ser Arg Asn	1830	
1835		1840			

<210> 260

<211> 1299
 <212> PRT
 <213> Homo sapiens
 <400> 260

Met Ala Ala Glu Thr Gln Thr Leu Asn Phe Gly Pro Glu Trp Leu Arg
 1 5 10 15
 Ala Leu Ser Ser Gly Gly Ser Ile Thr Ser Pro Pro Leu Ser Pro Ala
 20 25 30
 Leu Pro Lys Tyr Lys Leu Ala Asp Tyr Arg Tyr Gly Arg Glu Glu Met
 35 40 45
 Leu Ala Leu Phe Leu Lys Asp Asn Lys Ile Pro Ser Asp Leu Leu Asp
 50 55 60
 Lys Glu Phe Leu Pro Ile Leu Gln Glu Glu Pro Leu Pro Pro Leu Ala
 65 70 75 80
 Leu Val Pro Phe Thr Glu Glu Glu Gln Arg Asn Phe Ser Met Ser Val
 85 90 95
 Asn Ser Ala Ala Val Leu Arg Leu Thr Gly Arg Gly Gly Gly Thr
 100 105 110
 Val Val Gly Ala Pro Arg Gly Arg Ser Ser Ser Arg Gly Arg Gly Arg
 115 120 125
 Gly Arg Gly Glu Cys Gly Phe Tyr Gln Arg Ser Phe Asp Glu Val Glu
 130 135 140
 Gly Val Phe Gly Arg Gly Gly Gly Arg Glu Met His Arg Ser Gln Ser
 145 150 155 160
 Trp Glu Glu Arg Gly Asp Arg Arg Phe Glu Lys Pro Gly Arg Lys Asp
 165 170 175
 Val Gly Arg Pro Asn Phe Glu Glu Gly Gly Pro Thr Ser Val Gly Arg
 180 185 190
 Lys His Glu Phe Ile Arg Ser Glu Ser Glu Asn Trp Arg Ile Phe Arg
 195 200 205
 Glu Glu Gln Asn Gly Glu Asp Glu Asp Gly Gly Trp Arg Leu Ala Gly
 210 215 220
 Ser Arg Arg Asp Gly Glu Arg Trp Arg Pro His Ser Pro Asp Gly Pro
 225 230 235 240
 Arg Ser Ala Gly Trp Arg Glu His Met Glu Arg Arg Arg Arg Phe Glu
 245 250 255
 Phe Asp Phe Arg Asp Arg Asp Asp Glu Arg Gly Tyr Arg Arg Val Arg
 260 265 270
 Ser Gly Ser Gly Ser Ile Asp Asp Asp Arg Asp Ser Leu Pro Glu Trp
 275 280 285
 Cys Leu Glu Asp Ala Glu Glu Met Gly Thr Phe Asp Ser Ser Gly
 290 295 300
 Ala Phe Leu Ser Leu Lys Lys Val Gln Lys Glu Pro Ile Pro Glu Glu
 305 310 315 320
 Gln Glu Met Asp Phe Arg Pro Val Asp Glu Gly Glu Glu Cys Ser Asp
 325 330 335
 Ser Glu Gly Ser His Asn Glu Glu Ala Lys Glu Pro Asp Lys Thr Asn
 340 345 350
 Lys Lys Glu Gly Glu Lys Thr Asp Arg Val Gly Val Glu Ala Ser Glu
 355 360 365
 Glu Thr Pro Gln Thr Ser Ser Ser Ser Ala Arg Pro Gly Thr Pro Ser
 370 375 380
 Asp His Gln Ser Gln Glu Ala Ser Gln Phe Glu Arg Lys Asp Glu Pro
 385 390 395 400
 Lys Thr Glu Gln Thr Glu Lys Ala Glu Glu Thr Arg Met Glu Asn
 405 410 415
 Ser Leu Pro Ala Lys Val Pro Ser Arg Gly Asp Glu Met Val Ala Asp
 420 425 430
 Val Gln Gln Pro Leu Ser Gln Ile Pro Ser Asp Thr Ala Ser Pro Leu
 435 440 445
 Leu Ile Leu Pro Pro Pro Val Pro Asn Pro Ser Pro Thr Leu Arg Pro
 450 455 460
 Val Glu Thr Pro Val Val Gly Ala Pro Gly Met Gly Ser Val Ser Thr
 465 470 475 480
 Glu Pro Asp Asp Glu Gly Leu Lys His Leu Glu Gln Gln Ala Glu
 485 490 495
 Lys Met Val Ala Tyr Leu Gln Asp Ser Ala Leu Asp Asp Glu Arg Leu
 500 505 510
 Ala Ser Lys Leu Gln Glu His Arg Ala Lys Gly Val Ser Ile Pro Leu

515	Met	His	Glu	Ala	Met	Gln	Lys	Trp	Tyr	Tyr	Lys	Asp	Pro	Gln	Gly	Glu
530	Ile	Gln	Gly	Pro	Phe	Asn	Asn	Gln	Glu	Met	Ala	Glu	Trp	Phe	Gln	Ala
545	Gly	Tyr	Phe	Thr	Met	Ser	Leu	Leu	Val	Lys	Arg	Ala	Cys	Asp	Glu	Ser
565	Phe	Gln	Pro	Leu	Gly	Asp	Ile	Met	Lys	Met	Trp	Gly	Arg	Val	Pro	Phe
580	Ser	Pro	Gly	Pro	Ala	Pro	Pro	Pro	His	Met	Gly	Glu	Leu	Asp	Gln	Glu
595	Arg	Leu	Thr	Arg	Gln	Gln	Glu	Leu	Thr	Ala	Leu	Tyr	Gln	Met	Gln	His
610	Leu	Gln	Tyr	Gln	Gln	Phe	Leu	Ile	Gln	Gln	Gln	Tyr	Ala	Gln	Val	Leu
625	Ala	Gln	Gln	Gln	Lys	Ala	Ala	Leu	Ser	Ser	Gln	Gln	Gln	Gln	Gln	Leu
645	Ala	Leu	Leu	Leu	Gln	Gln	Phe	Gln	Thr	Leu	Lys	Met	Arg	Ile	Ser	Asp
660	Gln	Asn	Ile	Ile	Pro	Ser	Val	Thr	Arg	Ser	Val	Ser	Val	Pro	Asp	Thr
675	Gly	Ser	Ile	Trp	Glu	Leu	Gln	Pro	Thr	Ala	Ser	Gln	Pro	Thr	Val	Trp
690	Glu	Gly	Gly	Ser	Val	Trp	Asp	Leu	Pro	Leu	Asp	Thr	Thr	Thr	Pro	Gly
705	Pro	Ala	Leu	Glu	Gln	Leu	Gln	Gln	Leu	Glu	Lys	Ala	Lys	Ala	Ala	Lys
725	Leu	Glu	Gln	Glu	Arg	Arg	Glu	Ala	Glu	Met	Arg	Ala	Lys	Arg	Glu	Glu
740	Glu	Glu	Arg	Lys	Arg	Gln	Glu	Glu	Leu	Arg	Arg	Gln	Gln	Glu	Glu	Ile
755	Leu	Arg	Arg	Gln	Gln	Glu	Glu	Glu	Arg	Lys	Arg	Arg	Glu	Glu	Glu	Glu
770	Leu	Ala	Arg	Arg	Lys	Gln	Glu	Gly	Ala	Leu	Arg	Arg	Gln	Arg	Glu	Gln
785	Glu	Ile	Ala	Leu	Arg	Arg	Gln	Arg	Glu	Glu	Glu	Arg	Gln	Gln	Gln	Gln
805	Glu	Glu	Ala	Leu	Arg	Arg	Leu	Glu	Glu	Arg	Arg	Arg	Glu	Glu	Glu	Glu
820	Arg	Arg	Lys	Gln	Glu	Glu	Leu	Leu	Arg	Lys	Gln	Glu	Glu	Glu	Ala	Ala
835	Lys	Trp	Ala	Arg	Glu	Glu	Glu	Glu	Ala	Gln	Arg	Arg	Leu	Glu	Glu	Asn
850	Arg	Leu	Arg	Met	Glu	Glu	Glu	Ala	Ala	Arg	Leu	Arg	His	Glu	Glu	Glu
865	Glu	Arg	Lys	Arg	Lys	Glu	Leu	Glu	Val	Gln	Arg	Gln	Lys	Glu	Leu	Met
885	Arg	Gln	Arg	Gln	Gln	Gln	Gln	Glu	Ala	Leu	Arg	Arg	Leu	Gln	Gln	Gln
900	Gln	Gln	Gln	Gln	Gln	Leu	Ala	Gln	Met	Lys	Leu	Pro	Ser	Ser	Ser	Thr
915	Trp	Gly	Gln	Gln	Ser	Asn	Thr	Thr	Ala	Cys	Gln	Ser	Gln	Ala	Thr	Leu
930	Ser	Leu	Ala	Glu	Ile	Gln	Lys	Leu	Glu	Glu	Glu	Arg	Glu	Arg	Gln	Leu
945	Arg	Glu	Glu	Gln	Arg	Arg	Gln	Gln	Arg	Glu	Leu	Met	Lys	Ala	Leu	Gln
965	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Lys	Leu	Ser	Gly	Trp	Gly	Asn	Val
980	Ser	Lys	Pro	Ser	Gly	Thr	Thr	Lys	Ser	Leu	Leu	Glu	Ile	Gln	Gln	Glu
995	Glu	Ala	Arg	Gln	Met	Gln	Lys	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	His
1010	Gln	Gln	Pro	Asn	Arg	Ala	Arg	Asn	Asn	Thr	His	Ser	Asn	Leu	His	
1025	Thr	Ser	Ile	Gly	Asn	Ser	Val	Trp	Gly	Ser	Ile	Asn	Thr	Gly	Pro	
1040	Pro	Asn	Gln	Trp	Ala	Ser	Asp	Leu	Val	Ser	Ser	Ile	Trp	Ser	Asn	
1055							1060									

Ala Asp Thr Lys Asn Ser Asn Met Gly Phe Trp Asp Asp Ala Val
 1070 1075 1080
 Lys Glu Val Gly Pro Arg Asn Ser Thr Asn Lys Asn Lys Asn Asn
 1085 1090 1095
 Ala Ser Leu Ser Lys Ser Val Gly Val Ser Asn Arg Gln Asn Lys
 1100 1105 1110
 Lys Val Glu Glu Glu Glu Lys Leu Leu Lys Leu Phe Gln Gly Val
 1115 1120 1125
 Asn Lys Ala Gln Asp Gly Phe Thr Gln Trp Cys Glu Gln Met Leu
 1130 1135 1140
 His Ala Leu Asn Thr Ala Asn Asn Leu Gly Val Pro Thr Phe Val
 1145 1150 1155
 Ser Phe Leu Lys Glu Val Glu Ser Pro Tyr Glu Val His Asp Tyr
 1160 1165 1170
 Ile Arg Ala Tyr Leu Gly Asp Thr Ser Glu Ala Lys Glu Phe Ala
 1175 1180 1185
 Lys Gln Phe Leu Glu Arg Arg Ala Lys Gln Lys Ala Asn Gln Gln
 1190 1195 1200
 Arg Gln Gln Gln Gln Leu Pro Gln Gln Gln Gln Gln Gln Pro Pro
 1205 1210 1215
 Gln Gln Pro Pro Gln Gln Pro Gln Gln Gln Asp Ser Val Trp Gly
 1220 1225 1230
 Met Asn His Ser Thr Leu His Ser Val Phe Gln Thr Asn Gln Ser
 1235 1240 1245
 Asn Asn Gln Gln Ser Asn Phe Glu Ala Val Gln Ser Gly Lys Lys
 1250 1255 1260
 Lys Lys Lys Gln Lys Met Val Arg Ala Asp Pro Ser Leu Leu Gly
 1265 1270 1275
 Phe Ser Val Asn Ala Ser Ser Glu Arg Leu Asn Met Gly Glu Ile
 1280 1285 1290
 Glu Thr Leu Asp Asp Tyr
 1295

<210> 261
 <211> 107
 <212> PRT
 <213> Homo sapiens
 <400> 261

Met Ser Gly Cys Arg Val Phe Ile Gly Arg Leu Asn Pro Ala Ala Arg
 1 5 10 15
 Glu Lys Asp Val Glu Arg Phe Phe Lys Gly Tyr Gly Arg Ile Arg Asp
 20 25 30
 Ile Asp Leu Lys Arg Gly Phe Gly Phe Val Glu Phe Glu Asp Pro Arg
 35 40 45
 Asp Ala Asp Asp Ala Val Tyr Glu Leu Asp Gly Lys Glu Leu Cys Ser
 50 55 60
 Glu Arg Val Thr Ile Glu His Ala Arg Ala Arg Ser Arg Gly Gly Arg
 65 70 75 80
 Gly Arg Gly Arg Tyr Ser Asp Arg Phe Ser Ser Arg Arg Pro Arg Asn
 85 90 95
 Asp Arg Arg Tyr Val Lys Gly Gly Trp Leu His
 100 105

<210> 262
 <211> 184
 <212> PRT
 <213> Homo sapiens
 <400> 262

Met Val Arg Tyr Ser Leu Asp Pro Glu Asn Pro Thr Lys Ser Cys Lys
 1 5 10 15
 Ser Arg Gly Ser Asn Leu Arg Val His Phe Lys Asn Thr Arg Glu Thr
 20 25 30
 Ala Gln Ala Ile Lys Gly Met His Ile Arg Lys Ala Thr Lys Tyr Leu
 35 40 45
 Lys Asp Val Thr Leu Gln Lys Gln Cys Val Pro Phe Arg Arg Tyr Asn
 50 55 60
 Gly Gly Val Gly Arg Cys Ala Gln Ala Lys Gln Trp Gly Trp Thr Gln
 65 70 75 80
 Gly Arg Trp Pro Lys Lys Ser Ala Glu Phe Leu Leu His Met Leu Lys

Asn	Ala	Glu	Ser	85	Asn	Ala	Glu	Leu	Lys	90	Gly	Leu	Asp	Val	Asp	95	Ser	Leu
Val	Ile	Glu	His	100	Ile	Gln	Val	Asn	Lys	105	Ala	Pro	Lys	Met	Arg	110	Arg	Arg
Thr	Tyr	Arg	Ala	115	His	Gly	Arg	Ile	Asn	120	Pro	Tyr	Met	Ser	Ser	125	Pro	Cys
His	Ile	Glu	Met	130	Ile	Leu	Thr	Glu	Lys	135	Glu	Gln	Ile	Val	Pro	140	Lys	Pro
Glu	Glu	Glu	Val	145	Ala	Gln	Lys	Lys	Lys	150	Ile	Ser	Gln	Lys	Lys	155	Leu	Lys
Lys	Gln	Lys	Leu	165	Met	Ala	Arg	Glu		170						175		
				180														

<210> 263
 <211> 72
 <212> PRT
 <213> Homo sapiens
 <400> 263

Met	Ser	Ser	Lys	1	Thr	Ala	Ser	Thr	Asn	Asn	Ile	Ala	Gln	Ala	Arg	Arg
Thr	Val	Gln	Gln	5	Leu	Arg	Leu	Glu	Ala	10	Ser	Ile	Glu	Arg	Ile	15
Ser	Lys	Ala	Ser	20	Ala	Asp	Leu	Met	Ser	25	Tyr	Cys	Glu	Glu	His	30
Ser	Asp	Pro	Leu	35	Leu	Ile	Gly	Ile	Pro	40	Thr	Ser	Glu	Asn	Pro	45
Asp	Lys	Lys	Thr	50	Cys	Ile	Ile	Leu		55			60			60
				65						70						

<210> 264
 <211> 462
 <212> PRT
 <213> Homo sapiens
 <400> 264

Met	Lys	Thr	Arg	1	Arg	Thr	Thr	Arg	Leu	Gln	Gln	Gln	His	Ser	Glu	Gln
Pro	Pro	Leu	Gln	5	Pro	Ser	Pro	Val	Thr	10	Thr	Arg	Arg	Gly	Leu	15
Ser	His	Ser	Ser	20	Glu	Glu	Asp	Glu	Ala	25	Ser	Ser	Gln	Thr	Asp	30
Gln	Thr	Ile	Ser	35	Lys	Lys	Thr	Val	Arg	40	Ser	Ile	Gln	Glu	Ala	45
Ser	Glu	Asp	Leu	50	Val	Ile	Arg	Leu	Arg	55	Pro	Pro	Leu	Arg	Cys	60
Arg	Tyr	Glu	Ala	65	Thr	Ser	Val	Gln	Gln	70	Lys	Val	Asn	Phe	Ser	75
Gly	Glu	Thr	Glu	85	Glu	Asp	Asp	Gln	Asp	90	Ser	Ser	His	Ser	Ser	95
Thr	Val	Lys	Ala	100	Arg	Ser	Arg	Asp	Ser	105	Asp	Glu	Ser	Gly	Asp	110
Thr	Arg	Ser	Ser	115	Ser	Gln	Tyr	Ile	Glu	120	Ser	Phe	Trp	Gln	Ser	125
Ser	Gln	Asn	Phe	130	Thr	Ala	His	Asp	Lys	135	Gln	Arg	Ser	Val	Leu	140
Gly	Tyr	Gln	Lys	145	Thr	Pro	Gln	Glu	Trp	150	Ala	Pro	Gln	Thr	Ala	155
Arg	Thr	Arg	Met	165	Gln	Asn	Asp	Ser	Ile	170	Leu	Lys	Ser	Glu	Leu	175
Gln	Ser	Pro	Ser	180	Thr	Ser	Ser	Arg	Gln	185	Val	Thr	Gly	Gln	Pro	190
Ala	Ser	Phe	Val	195	Lys	Arg	Asn	Arg	Trp	200	Trp	Leu	Leu	Pro	Leu	205
Ala	Leu	Ala	Ser	210	Gly	Ser	Phe	Trp	Phe	215	Phe	Ser	Thr	Pro	Glu	220
Thr	Thr	Ala	Val	225	Gln	Glu	Phe	Gln	Asn	230	Gln	Met	Asn	Gln	Leu	235
Lys	Tyr	Gln	Gly	245	Gln	Asp	Glu	Lys	Leu	250	Trp	Lys	Arg	Ser	Gln	255
				260						265						270

Leu Glu Lys His Leu Asn Ser Ser His Pro Arg Ser Gln Pro Ala Ile
 275 280 285
 Leu Leu Leu Thr Ala Ala Arg Asp Ala Glu Glu Ala Leu Arg Cys Leu
 290 295 300
 Ser Glu Gln Ile Ala Asp Ala Tyr Ser Ser Phe Arg Ser Val Arg Ala
 305 310 315 320
 Ile Arg Ile Asp Gly Thr Asp Lys Ala Thr Gln Asp Ser Asp Thr Val
 325 330 335
 Lys Leu Glu Val Asp Gln Glu Leu Ser Asn Gly Phe Lys Asn Gly Gln
 340 345 350
 Asn Ala Ala Val Val His Arg Phe Glu Ser Phe Pro Ala Gly Ser Thr
 355 360 365
 Leu Ile Phe Tyr Lys Tyr Cys Asp His Glu Asn Ala Ala Phe Lys Asp
 370 375 380
 Val Ala Leu Val Leu Thr Val Leu Leu Glu Glu Glu Thr Leu Gly Thr
 385 390 395 400
 Ser Leu Gly Leu Lys Glu Val Glu Glu Lys Val Arg Asp Phe Leu Lys
 405 410 415
 Val Lys Phe Thr Asn Ser Asn Thr Pro Asn Ser Tyr Asn His Met Asp
 420 425 430
 Pro Asp Lys Leu Asn Gly Leu Trp Ser Arg Ile Ser His Leu Val Leu
 435 440 445
 Pro Val Gln Pro Glu Asn Ala Leu Lys Arg Gly Ile Cys Leu
 450 455 460

<210> 265
 <211> 192
 <212> PRT
 <213> Homo sapiens
 <400> 265

Met Phe Ser Gln Phe Thr Asp Ile Lys Arg Lys Asp Phe Gly Ile Met
 1 5 10 15
 Phe Leu His His Leu Val Ser Ile Phe Leu Ile Thr Phe Ser Tyr Val
 20 25 30
 Asn Asn Met Ala Arg Val Gly Thr Leu Val Leu Cys Leu His Asp Ser
 35 40 45
 Ala Asp Ala Leu Leu Glu Ala Ala Lys Met Ala Asn Tyr Ala Lys Phe
 50 55 60
 Gln Lys Met Cys Asp Leu Leu Phe Val Met Phe Ala Val Val Phe Ile
 65 70 75 80
 Thr Thr Arg Leu Gly Ile Phe Pro Leu Trp Val Leu Asn Thr Thr Leu
 85 90 95
 Phe Glu Ser Trp Glu Ile Val Gly Pro Tyr Pro Ser Trp Trp Val Phe
 100 105 110
 Asn Leu Leu Leu Leu Leu Val Gln Gly Leu Asn Cys Phe Trp Ser Tyr
 115 120 125
 Leu Ile Val Lys Ile Ala Cys Lys Ala Val Ser Arg Gly Lys Val Ser
 130 135 140
 Lys Asp Asp Arg Ser Asp Ile Glu Ser Ser Ser Asp Glu Glu Asp Ser
 145 150 155 160
 Glu Pro Pro Gly Lys Asn Pro His Thr Ala Thr Thr Thr Asn Gly Thr
 165 170 175
 Ser Gly Thr Asn Gly Tyr Leu Leu Thr Gly Ser Cys Ser Met Asp Asp
 180 185 190

<210> 266
 <211> 1838
 <212> PRT
 <213> Homo sapiens
 <400> 266

Met Asp Val His Thr Arg Trp Lys Ala Arg Ser Ala Leu Arg Pro Gly
 1 5 10 15
 Ala Pro Leu Leu Pro Pro Leu Leu Leu Leu Leu Trp Ala Pro Pro
 20 25 30
 Pro Ser Arg Ala Ala Gln Pro Ala Asp Leu Leu Lys Val Leu Asp Phe
 35 40 45
 His Asn Leu Pro Asp Gly Ile Thr Lys Thr Thr Gly Phe Cys Ala Thr
 50 55 60
 Arg Arg Ser Ser Lys Gly Pro Asp Val Ala Tyr Arg Val Thr Lys Asp

65	Ala	Gln	Leu	Ser	Ala	Pro	Thr	Lys	Gln	Leu	Tyr	Pro	Ala	Ser	Ala	80
					85					90						95
Pro	Glu	Asp	Phe	Ser	Ile	Leu	Thr	Thr	Val	Lys	Ala	Lys	Lys	Gly	Ser	
			100					105								110
Gln	Ala	Phe	Leu	Val	Ser	Ile	Tyr	Asn	Glu	Gln	Gly	Ile	Gln	Gln	Ile	
		115					120									125
Gly	Leu	Glu	Leu	Gly	Arg	Ser	Pro	Val	Phe	Leu	Tyr	Glu	Asp	His	Thr	
		130				135					140					
Gly	Lys	Pro	Gly	Pro	Glu	Asp	Tyr	Pro	Leu	Phe	Arg	Gly	Ile	Asn	Leu	
		145			150					155						160
Ser	Asp	Gly	Lys	Trp	His	Arg	Ile	Ala	Leu	Ser	Val	His	Lys	Lys	Asn	
			165						170							175
Val	Thr	Leu	Ile	Leu	Asp	Cys	Lys	Lys	Lys	Thr	Thr	Lys	Phe	Leu	Asp	
		180						185								190
Arg	Ser	Asp	His	Pro	Met	Ile	Asp	Ile	Asn	Gly	Ile	Ile	Val	Phe	Gly	
		195					200									205
Thr	Arg	Ile	Leu	Asp	Glu	Glu	Val	Phe	Glu	Gly	Asp	Ile	Gln	Gln	Leu	
		210				215					220					
Leu	Phe	Val	Ser	Asp	His	Arg	Ala	Ala	Tyr	Asp	Tyr	Cys	Glu	His	Tyr	
		225			230					235						240
Ser	Pro	Asp	Cys	Asp	Thr	Ala	Val	Pro	Asp	Thr	Pro	Gln	Ser	Gln	Asp	
			245						250							255
Pro	Asn	Pro	Asp	Glu	Tyr	Tyr	Thr	Glu	Gly	Asp	Gly	Glu	Gly	Glu	Thr	
			260					265								270
Tyr	Tyr	Tyr	Glu	Tyr	Pro	Tyr	Tyr	Glu	Asp	Pro	Glu	Asp	Leu	Gly	Lys	
		275					280									285
Glu	Pro	Thr	Pro	Ser	Lys	Lys	Pro	Val	Glu	Ala	Ala	Lys	Glu	Thr	Thr	
		290				295					300					
Glu	Val	Pro	Glu	Glu	Leu	Thr	Pro	Thr	Pro	Thr	Glu	Ala	Ala	Pro	Met	
		305			310						315					320
Pro	Glu	Thr	Ser	Glu	Gly	Ala	Gly	Lys	Glu	Glu	Asp	Val	Gly	Ile	Gly	
			325						330							335
Asp	Tyr	Asp	Tyr	Val	Pro	Ser	Glu	Asp	Tyr	Tyr	Thr	Pro	Ser	Pro	Tyr	
			340					345								350
Asp	Asp	Leu	Thr	Tyr	Gly	Glu	Gly	Glu	Glu	Asn	Pro	Asp	Gln	Pro	Thr	
		355					360									365
Asp	Pro	Gly	Ala	Gly	Ala	Glu	Ile	Pro	Thr	Ser	Thr	Ala	Asp	Thr	Ser	
		370				375					380					
Asn	Ser	Ser	Asn	Pro	Ala	Pro	Pro	Pro	Gly	Glu	Gly	Ala	Asp	Asp	Leu	
				390						395						400
Glu	Gly	Glu	Phe	Thr	Glu	Glu	Thr	Ile	Arg	Asn	Leu	Asp	Glu	Asn	Tyr	
			405					410								415
Tyr	Asp	Pro	Tyr	Tyr	Asp	Pro	Thr	Ser	Ser	Pro	Ser	Glu	Ile	Gly	Pro	
			420					425								430
Gly	Met	Pro	Ala	Asn	Gln	Asp	Thr	Ile	Tyr	Glu	Gly	Ile	Gly	Gly	Pro	
		435					440									445
Arg	Gly	Glu	Lys	Gly	Gln	Lys	Gly	Glu	Pro	Ala	Ile	Ile	Glu	Pro	Gly	
		450				455					460					
Met	Leu	Ile	Glu	Gly	Pro	Pro	Gly	Pro	Glu	Gly	Pro	Ala	Gly	Leu	Pro	
					470				475							480
Gly	Pro	Pro	Gly	Thr	Met	Gly	Pro	Thr	Gly	Gln	Val	Gly	Asp	Pro	Gly	
				485					490							495
Glu	Arg	Gly	Pro	Pro	Gly	Arg	Pro	Gly	Leu	Pro	Gly	Ala	Asp	Gly	Leu	
			500					505								510
Pro	Gly	Pro	Pro	Gly	Thr	Met	Leu	Met	Leu	Pro	Phe	Arg	Phe	Gly	Gly	
		515					520									525
Gly	Gly	Asp	Ala	Gly	Ser	Lys	Gly	Pro	Met	Val	Ser	Ala	Gln	Glu	Ser	
						535										540
Gln	Ala	Gln	Ala	Ile	Leu	Gln	Gln	Ala	Arg	Leu	Ala	Leu	Arg	Gly	Pro	
					550					555						560
Ala	Gly	Pro	Met	Gly	Leu	Thr	Gly	Arg	Pro	Gly	Pro	Val	Gly	Pro	Pro	
				565					570							575
Gly	Ser	Gly	Gly	Leu	Lys	Gly	Glu	Pro	Gly	Asp	Val	Gly	Pro	Gln	Gly	
			580				585									590
Pro	Arg	Gly	Val	Gln	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Lys	Pro	Gly	Arg	
		595				600						605				
Arg	Gly	Arg	Ala	Gly	Ser	Asp	Gly	Ala	Arg	Gly	Met	Pro	Gly	Gln	Thr	
					615						620					

Gly Pro Lys Gly Asp Arg Gly Phe Asp Gly Leu Ala Gly Leu Pro Gly
 625 630 635 640
 Glu Lys Gly His Arg Gly Asp Pro Gly Pro Ser Gly Pro Pro Gly Pro
 645 650 655
 Pro Gly Asp Asp Gly Glu Arg Gly Asp Asp Gly Glu Val Gly Pro Arg
 660 665 670
 Gly Leu Pro Gly Glu Pro Gly Pro Arg Gly Leu Leu Gly Pro Lys Gly
 675 680 685
 Pro Pro Gly Pro Pro Gly Pro Pro Gly Val Thr Gly Met Asp Gly Gln
 690 695 700
 Pro Gly Pro Lys Gly Asn Val Gly Pro Gln Gly Glu Pro Gly Pro Pro
 705 710 715 720
 Gly Gln Gln Gly Asn Pro Gly Ala Gln Gly Leu Pro Gly Pro Gln Gly
 725 730 735
 Ala Ile Gly Pro Pro Gly Glu Lys Gly Pro Leu Gly Lys Pro Gly Leu
 740 745 750
 Pro Gly Met Pro Gly Ala Asp Gly Pro Pro Gly His Pro Gly Lys Glu
 755 760 765
 Gly Pro Pro Gly Glu Lys Gly Gly Gln Gly Pro Pro Gly Pro Gln Gly
 770 775 780
 Pro Ile Gly Tyr Pro Gly Pro Arg Gly Val Lys Gly Ala Asp Gly Ile
 785 790 795 800
 Arg Gly Leu Lys Gly Thr Lys Gly Glu Lys Gly Glu Asp Gly Phe Pro
 805 810 815
 Gly Phe Lys Gly Asp Met Gly Ile Lys Gly Asp Arg Gly Glu Ile Gly
 820 825 830
 Pro Pro Gly Pro Arg Gly Glu Asp Gly Pro Glu Gly Pro Lys Gly Arg
 835 840 845
 Gly Gly Pro Asn Gly Asp Pro Gly Pro Leu Gly Pro Pro Gly Glu Lys
 850 855 860
 Gly Lys Leu Gly Val Pro Gly Leu Pro Gly Tyr Pro Gly Arg Gln Gly
 865 870 875 880
 Pro Lys Gly Ser Ile Gly Phe Pro Gly Phe Pro Gly Ala Asn Gly Glu
 885 890 895
 Lys Gly Gly Arg Gly Thr Pro Gly Lys Pro Gly Pro Arg Gly Gln Arg
 900 905 910
 Gly Pro Thr Gly Pro Arg Gly Glu Arg Gly Pro Arg Gly Ile Thr Gly
 915 920 925
 Lys Pro Gly Pro Lys Gly Asn Ser Gly Gly Asp Gly Pro Ala Gly Pro
 930 935 940
 Pro Gly Glu Arg Gly Pro Asn Gly Pro Gln Gly Pro Thr Gly Phe Pro
 945 950 955 960
 Gly Pro Lys Gly Pro Pro Gly Pro Pro Gly Lys Asp Gly Leu Pro Gly
 965 970 975
 His Pro Gly Gln Arg Gly Glu Thr Gly Phe Gln Gly Lys Thr Gly Pro
 980 985 990
 Pro Gly Pro Pro Gly Val Val Gly Pro Gln Gly Pro Thr Gly Glu Thr
 995 1000 1005
 Gly Pro Met Gly Glu Arg Gly His Pro Gly Pro Pro Gly Pro Pro
 1010 1015 1020
 Gly Glu Gln Gly Leu Pro Gly Leu Ala Gly Lys Glu Gly Thr Lys
 1025 1030 1035
 Gly Asp Pro Gly Pro Ala Gly Leu Pro Gly Lys Asp Gly Pro Pro
 1040 1045 1050
 Gly Leu Arg Gly Phe Pro Gly Asp Arg Gly Leu Pro Gly Pro Val
 1055 1060 1065
 Gly Ala Leu Gly Leu Lys Gly Asn Glu Gly Pro Pro Gly Pro Pro
 1070 1075 1080
 Gly Pro Ala Gly Ser Pro Gly Glu Arg Gly Pro Ala Gly Ala Ala
 1085 1090 1095
 Gly Pro Ile Gly Ile Pro Gly Arg Pro Gly Pro Gln Gly Pro Pro
 1100 1105 1110
 Gly Pro Ala Gly Glu Lys Gly Ala Pro Gly Glu Lys Gly Pro Gln
 1115 1120 1125
 Gly Pro Ala Gly Arg Asp Gly Leu Gln Gly Pro Val Gly Leu Pro
 1130 1135 1140
 Gly Pro Ala Gly Pro Val Gly Pro Pro Gly Glu Asp Gly Asp Lys
 1145 1150 1155
 Gly Glu Ile Gly Glu Pro Gly Gln Lys Gly Ser Lys Gly Asp Lys

1160	Gly Glu	Gln Gly Pro Pro	1165	Gly Pro Thr Gly Pro	1170	Gln Gly Pro Ile
1175	Gly Gln	Pro Gly Pro Ser	1180	Gly Ala Asp Gly Glu	1185	Gly Pro Arg
1190	Gly Gln	Gln Gly Leu Phe	1195	Gly Gln Lys Gly Asp	1200	Gly Pro Arg
1205	Gly Phe	Pro Gly Pro Pro	1210	Gly Pro Val Gly Leu	1215	Gly Leu Pro
1220	Gly Pro	Pro Gly Glu Lys	1225	Gly Glu Thr Gly Asp	1230	Gly Gln Met
1235	Gly Pro	Pro Gly Pro Pro	1240	Gly Pro Arg Gly Pro	1245	Gly Ala Pro
1250	Gly Ala	Asp Gly Pro Gln	1255	Gly Pro Pro Gly Gly	1260	Gly Asn Pro
1265	Gly Ala	Val Gly Glu Lys	1270	Gly Glu Pro Gly Glu	1275	Gly Glu Pro
1280	Gly Pro	Ser Gly Arg Ser	1285	Gly Pro Pro Gly Pro	1290	Gly Glu Arg
1295	Gly Glu	Lys Gly Glu Ser	1300	Gly Pro Ser Gly Ala	1305	Gly Pro Pro
1310	Gly Pro	Lys Gly Pro Pro	1315	Gly Asp Asp Gly Pro	1320	Gly Ser Pro
1325	Gly Pro	Val Gly Phe Pro	1330	Gly Asp Pro Gly Pro	1335	Gly Glu Pro
1340	Gly Pro	Ala Gly Gln Asp	1345	Gly Pro Pro Gly Asp	1350	Gly Asp Asp
1355	Gly Glu	Pro Gly Gln Thr	1360	Gly Ser Pro Gly Pro	1365	Gly Glu Pro
1370	Gly Pro	Ser Gly Pro Pro	1375	Gly Lys Arg Gly Pro	1380	Gly Pro Ala
1385	Gly Pro	Glu Gly Arg Gln	1390	Gly Glu Lys Gly Ala	1395	Gly Glu Ala
1400	Gly Leu	Glu Gly Pro Pro	1405	Gly Lys Thr Gly Pro	1410	Gly Pro Gln
1415	Gly Ala	Pro Gly Lys Pro	1420	Gly Pro Asp Gly Leu	1425	Gly Ile Pro
1430	Gly Pro	Val Gly Glu Gln	1435	Gly Leu Pro Gly Ser	1440	Gly Pro Asp
1445	Gly Pro	Pro Gly Pro Met	1450	Gly Pro Pro Gly Leu	1455	Gly Leu Lys
1460	Gly Asp	Ser Gly Pro Lys	1465	Gly Glu Lys Gly His	1470	Gly Leu Ile
1475	Gly Leu	Ile Gly Pro Pro	1480	Gly Glu Gln Gly Glu	1485	Gly Asp Arg
1490	Gly Leu	Pro Gly Pro Gln	1495	Gly Ser Ser Gly Pro	1500	Gly Glu Gln
1505	Gly Ile	Thr Gly Pro Ser	1510	Gly Pro Ile Gly Pro	1515	Gly Pro Pro
1520	Gly Leu	Pro Gly Pro Pro	1525	Gly Pro Lys Gly Ala	1530	Gly Ser Ser
1535	Gly Pro	Thr Gly Pro Lys	1540	Gly Glu Ala Gly His	1545	Gly Pro Pro
1550	Gly Pro	Pro Gly Pro Pro	1555	Gly Glu Val Ile Gln	1560	Leu Pro Ile
1565	Gln Ala	Ser Arg Thr Arg	1570	Gly Asn Ile Asp Ala	1575	Gln Leu Leu
1580	Asp Asp	Gly Asn Gly Glu	1585	Gly Tyr Val Asp Tyr	1590	Asp Gly Met
1595	Glu Glu	Ile Phe Gly Ser	1600	Gly Asn Ser Leu Lys	1605	Glu Ile Glu
1610	Gln Met	Lys Arg Pro Leu	1615	Gly Thr Gln Gln Asn	1620	Ala Arg Thr
1625	Cys Lys	Asp Leu Gln Leu	1630	Gly His Pro Asp Phe	1635	Asp Gly Glu
1640	Tyr Trp	Val Asp Pro Asn	1645	Gly Gly Cys Ser Arg	1650	Ser Phe Lys
1655	Val Tyr	Cys Asn Phe Thr	1660	Gly Gly Ser Thr	1665	Val Phe Pro
1670			1675		1680	

Asp Lys Lys Ser Glu Gly Ala Arg Ile Thr Ser Trp Pro Lys Glu
 1685 1690
 Asn Pro Gly Ser Trp Phe Ser Glu Phe Lys Arg Gly Lys Leu Leu
 1700 1705
 Ser Tyr Val Asp Ala Glu Gly Asn Pro Val Gly Val Val Gln Met
 1715 1720
 Thr Phe Leu Arg Leu Leu Ser Ala Ser Ala His Gln Asn Val Thr
 1730 1735
 Tyr His Cys Tyr Gln Ser Val Ala Trp Gln Asp Ala Ala Thr Gly
 1745 1750
 Ser Tyr Asp Lys Ala Leu Arg Phe Leu Gly Ser Asn Asp Glu Glu
 1760 1765
 Met Ser Tyr Asp Asn Asn Pro Tyr Ile Arg Ala Leu Val Asp Gly
 1775 1780
 Cys Ala Thr Lys Lys Gly Tyr Gln Lys Thr Val Leu Glu Ile Asp
 1790 1795
 Thr Pro Lys Val Glu Gln Val Pro Ile Val Asp Ile Met Phe Asn
 1805 1810
 Asp Phe Gly Glu Ala Ser Gln Lys Phe Gly Phe Glu Val Gly Pro
 1820 1825
 Ala Cys Phe Met Gly 1830
 1835

<210> 267
 <211> 109
 <212> PRT
 <213> Homo sapiens
 <400> 267

Met Lys Phe Ile Ser Thr Ser Leu Leu Leu Met Leu Leu Val Ser Ser
 1 5 10 15
 Leu Ser Pro Val Gln Gly Val Leu Glu Val Tyr Tyr Thr Ser Leu Arg
 20 25 30
 Cys Arg Cys Val Gln Glu Ser Ser Val Phe Ile Pro Arg Arg Phe Ile
 35 40 45
 Asp Arg Ile Gln Ile Leu Pro Arg Gly Asn Gly Cys Pro Arg Lys Glu
 50 55 60
 Ile Ile Val Trp Lys Lys Asn Lys Ser Ile Val Cys Val Asp Pro Gln
 65 70 75 80
 Ala Glu Trp Ile Gln Arg Met Met Glu Val Leu Arg Lys Arg Ser Ser
 85 90 95
 Ser Thr Leu Pro Val Pro Val Phe Lys Arg Lys Ile Pro
 100 105

<210> 268
 <211> 504
 <212> PRT
 <213> Homo sapiens
 <400> 268

Met Phe Pro Arg Glu Lys Thr Trp Asn Ile Ser Phe Ala Gly Cys Gly
 1 5 10 15
 Phe Leu Gly Val Tyr Tyr Val Gly Val Ala Ser Cys Leu Arg Glu His
 20 25 30
 Ala Pro Phe Leu Val Ala Asn Ala Thr His Ile Tyr Gly Ala Ser Ala
 35 40 45
 Gly Ala Leu Thr Ala Thr Ala Leu Val Thr Gly Val Cys Leu Gly Glu
 50 55 60
 Ala Gly Ala Lys Phe Ile Glu Val Ser Lys Glu Ala Arg Lys Arg Phe
 65 70 75 80
 Leu Gly Pro Leu His Pro Ser Phe Asn Leu Val Lys Ile Ile Arg Ser
 85 90 95
 Phe Leu Leu Lys Val Leu Pro Ala Asp Ser His Glu His Ala Ser Gly
 100 105 110
 Arg Leu Gly Ile Ser Leu Thr Arg Val Ser Asp Gly Glu Asn Val Ile
 115 120 125
 Ile Ser His Phe Asn Ser Lys Asp Glu Leu Ile Gln Ala Asn Val Cys
 130 135 140
 Ser Gly Phe Ile Pro Val Tyr Cys Gly Leu Ile Pro Pro Ser Leu Gln
 145 150 155 160
 Gly Val Arg Tyr Val Asp Gly Gly Ile Ser Asp Asn Leu Pro Leu Tyr

165
 Glu Leu Lys Asn Thr Ile Thr Val Ser Pro Phe Ser Gly Glu Ser Asp
 180
 Ile Cys Pro Gln Asp Ser Ser Thr Asn Ile His Glu Leu Arg Val Thr
 195
 Asn Thr Ser Ile Gln Phe Asn Leu Arg Asn Leu Tyr Arg Leu Ser Lys
 210
 Ala Leu Phe Pro Pro Glu Pro Leu Val Leu Arg Glu Met Cys Lys Gln
 225
 Gly Tyr Arg Asp Gly Leu Arg Phe Leu Gln Arg Asn Gly Leu Leu Asn
 245
 Arg Pro Asn Pro Leu Leu Ala Leu Pro Pro Ala Arg Pro His Gly Pro
 260
 Glu Asp Lys Asp Gln Ala Val Glu Ser Ala Gln Ala Glu Asp Tyr Ser
 275
 Gln Leu Pro Gly Glu Asp His Ile Leu Glu His Leu Pro Ala Arg Leu
 290
 Asn Glu Ala Leu Leu Glu Ala Cys Val Glu Pro Thr Asp Leu Leu Thr
 305
 Thr Leu Ser Asn Met Leu Pro Val Arg Leu Ala Thr Ala Met Met Val
 325
 Pro Tyr Thr Leu Pro Leu Glu Ser Ala Leu Ser Phe Thr Ile Arg Leu
 340
 Leu Glu Trp Leu Pro Asp Val Pro Glu Asp Ile Arg Trp Met Lys Glu
 355
 Gln Thr Gly Ser Ile Cys Gln Tyr Leu Val Met Arg Ala Lys Arg Lys
 370
 Leu Gly Arg His Leu Pro Ser Arg Leu Pro Glu Gln Val Glu Leu Arg
 385
 Arg Val Gln Ser Leu Pro Ser Val Pro Leu Ser Cys Ala Ala Tyr Arg
 405
 Glu Ala Leu Pro Gly Trp Met Arg Asn Asn Leu Ser Leu Gly Asp Ala
 420
 Leu Ala Lys Trp Glu Glu Cys Gln Arg Gln Leu Leu Leu Gly Leu Phe
 435
 Cys Thr Asn Val Ala Phe Pro Pro Glu Ala Leu Arg Met Arg Ala Pro
 450
 Ala Asp Pro Ala Pro Ala Pro Ala Asp Pro Ala Ser Pro Gln His Gln
 465
 Pro Ala Gly Pro Ala Pro Leu Leu Ser Thr Pro Ala Pro Glu Ala Arg
 485
 Pro Val Ile Gly Ala Leu Gly Leu
 500

<210> 269
 <211> 1498
 <212> PRT
 <213> Homo sapiens
 <400> 269

Met Val Ala Leu Arg Gly Leu Gly Ser Gly Leu Gln Pro Trp Cys Pro
 1
 Leu Asp Leu Arg Leu Glu Trp Val Asp Thr Val Trp Glu Leu Asp Phe
 20
 Thr Glu Thr Glu Pro Leu Asp Pro Ser Ile Glu Ala Glu Ile Ile Glu
 35
 Thr Gly Leu Ala Ala Phe Thr Lys Leu Tyr Glu Ser Leu Leu Pro Phe
 50
 Ala Thr Gly Glu His Gly Ser Met Glu Ser Ile Trp Thr Phe Phe Ile
 65
 Glu Asn Asn Val Ser His Ser Thr Leu Val Ala Leu Phe Tyr His Phe
 85
 Val Gln Ile Val His Lys Lys Asn Val Ser Val Gln Tyr Arg Glu Tyr
 100
 Gly Leu His Ala Ala Gly Leu Tyr Phe Leu Leu Leu Glu Val Pro Gly
 115
 Ser Val Ala Asn Gln Val Phe His Pro Val Met Phe Asp Lys Cys Ile
 130
 Gln Thr Leu Lys Lys Ser Trp Pro Gln Glu Ser Asn Leu Asn Arg Lys
 145
 150
 155
 160

Arg Lys Lys Glu Gln Pro Lys Ser Ser Gln Ala Asn Pro Gly Arg His
 165 170 175
 Arg Lys Arg Gly Lys Pro Pro Arg Arg Glu Asp Ile Glu Met Asp Glu
 180 185 190
 Ile Ile Glu Glu Gln Glu Asp Glu Asn Ile Cys Phe Ser Ala Arg Asp
 195 200 205
 Leu Ser Gln Ile Arg Asn Ala Ile Phe His Leu Leu Lys Asn Phe Leu
 210 215 220
 Arg Leu Leu Pro Lys Phe Ser Leu Lys Glu Lys Pro Gln Cys Val Gln
 225 230 235 240
 Asn Cys Ile Glu Val Phe Val Ser Leu Thr Asn Phe Glu Pro Val Leu
 245 250 255
 His Glu Cys His Val Thr Gln Ala Arg Ala Leu Asn Gln Ala Lys Tyr
 260 265 270
 Ile Pro Glu Leu Ala Tyr Tyr Gly Leu Tyr Leu Leu Cys Ser Pro Ile
 275 280 285
 His Gly Glu Gly Asp Lys Val Ile Ser Cys Val Phe His Gln Met Leu
 290 295 300
 Ser Val Ile Leu Met Leu Glu Val Gly Glu Gly Ser His Arg Ala Pro
 305 310 315 320
 Leu Ala Val Thr Ser Gln Val Ile Asn Cys Arg Asn Gln Ala Val Gln
 325 330 335
 Phe Ile Ser Ala Leu Val Asp Glu Leu Lys Glu Ser Ile Phe Pro Val
 340 345 350
 Val Arg Ile Leu Leu Gln His Ile Cys Ala Lys Val Val Asp Lys Ser
 355 360 365
 Glu Tyr Arg Thr Phe Ala Ala Gln Ser Leu Val Gln Leu Leu Ser Lys
 370 375 380
 Leu Pro Cys Gly Glu Tyr Ala Met Phe Ile Ala Trp Leu Tyr Lys Tyr
 385 390 395 400
 Ser Arg Ser Ser Lys Ile Pro His Arg Val Phe Thr Leu Asp Val Val
 405 410 415
 Leu Ala Leu Leu Glu Leu Pro Glu Arg Glu Val Asp Asn Thr Leu Ser
 420 425 430
 Leu Glu His Gln Lys Phe Leu Lys His Lys Phe Leu Val Gln Glu Ile
 435 440 445
 Met Phe Asp Arg Cys Leu Asp Lys Ala Pro Thr Val Arg Ser Lys Ala
 450 455 460
 Leu Ser Ser Phe Ala His Cys Leu Glu Leu Thr Val Thr Ser Ala Ser
 465 470 475 480
 Glu Ser Ile Leu Glu Leu Leu Ile Asn Ser Pro Thr Phe Ser Val Ile
 485 490 495
 Glu Ser His Pro Gly Thr Leu Leu Arg Asn Ser Ser Ala Phe Ser Tyr
 500 505 510
 Gln Arg Gln Thr Ser Asn Arg Ser Glu Pro Ser Gly Glu Ile Asn Ile
 515 520 525
 Asp Ser Ser Gly Glu Thr Val Gly Ser Gly Glu Arg Cys Val Met Ala
 530 535 540
 Met Leu Arg Arg Arg Ile Arg Asp Glu Lys Thr Asn Val Arg Lys Ser
 545 550 555 560
 Ala Leu Gln Val Leu Val Ser Ile Leu Lys His Cys Asp Val Ser Gly
 565 570 575
 Met Lys Glu Asp Leu Trp Ile Leu Gln Asp Gln Cys Arg Asp Pro Ala
 580 585 590
 Val Ser Val Arg Lys Gln Ala Leu Gln Ser Leu Thr Glu Leu Leu Met
 595 600 605
 Ala Gln Pro Arg Cys Val Gln Ile Gln Lys Ala Trp Leu Arg Gly Val
 610 615 620
 Val Pro Val Val Met Asp Cys Glu Ser Thr Val Gln Glu Lys Ala Leu
 625 630 635 640
 Glu Phe Leu Asp Gln Leu Leu Leu Gln Asn Ile Arg His His Ser His
 645 650 655
 Phe His Ser Gly Asp Asp Ser Gln Val Leu Ala Trp Ala Leu Leu Thr
 660 665 670
 Leu Leu Thr Thr Glu Ser Gln Glu Leu Ser Arg Tyr Leu Asn Lys Ala
 675 680 685
 Phe His Ile Trp Ser Lys Lys Glu Lys Phe Ser Pro Thr Phe Ile Asn
 690 695 700
 Asn Val Ile Ser His Thr Gly Thr Glu His Ser Ala Pro Ala Trp Met

705					710					715				720	
Leu	Leu	Ser	Lys	Ile	Ala	Gly	Ser	Ser	Pro	Arg	Leu	Asp	Tyr	Ser	Arg
				725					730					735	
Ile	Ile	Gln	Ser	Trp	Glu	Lys	Ile	Ser	Ser	Gln	Gln	Asn	Pro	Asn	Ser
			740					745					750		
Asn	Thr	Leu	Gly	His	Ile	Leu	Cys	Val	Ile	Gly	His	Ile	Ala	Lys	His
		755					760					765			
Leu	Pro	Lys	Ser	Thr	Arg	Asp	Lys	Val	Thr	Asp	Ala	Val	Lys	Cys	Lys
	770					775					780				
Leu	Asn	Gly	Phe	Gln	Trp	Ser	Leu	Glu	Val	Ile	Ser	Ser	Ala	Val	Asp
785					790					795					800
Ala	Leu	Gln	Arg	Leu	Cys	Arg	Ala	Ser	Ala	Glu	Thr	Pro	Ala	Glu	Glu
				805					810					815	
Gln	Glu	Leu	Leu	Thr	Gln	Val	Cys	Gly	Asp	Val	Leu	Ser	Thr	Cys	Glu
			820					825					830		
His	Arg	Leu	Ser	Asn	Ile	Val	Leu	Lys	Glu	Asn	Gly	Thr	Gly	Asn	Met
		835					840					845			
Asp	Glu	Asp	Leu	Leu	Val	Lys	Tyr	Ile	Phe	Thr	Leu	Gly	Asp	Ile	Ala
	850					855					860				
Gln	Leu	Cys	Pro	Ala	Arg	Val	Glu	Lys	Arg	Ile	Phe	Leu	Leu	Ile	Gln
865					870					875					880
Ser	Val	Leu	Ala	Ser	Ser	Ala	Asp	Ala	Asp	His	Ser	Pro	Ser	Ser	Gln
				885					890					895	
Gly	Ser	Ser	Glu	Ala	Pro	Ala	Ser	Gln	Pro	Pro	Pro	Gln	Val	Arg	Gly
			900					905					910		
Ser	Val	Met	Pro	Ser	Val	Ile	Arg	Ala	His	Ala	Ile	Ile	Thr	Leu	Gly
		915					920					925			
Lys	Leu	Cys	Leu	Gln	His	Glu	Asp	Leu	Ala	Lys	Lys	Ser	Ile	Pro	Ala
	930					935					940				
Leu	Val	Arg	Glu	Leu	Glu	Val	Cys	Glu	Asp	Val	Ala	Val	Arg	Asn	Asn
945					950					955					960
Val	Ile	Ile	Val	Met	Cys	Asp	Leu	Cys	Ile	Arg	Tyr	Thr	Ile	Met	Val
				965					970					975	
Asp	Lys	Tyr	Ile	Pro	Asn	Ile	Ser	Met	Cys	Leu	Lys	Asp	Ser	Asp	Pro
		980						985					990		
Phe	Ile	Arg	Lys	Gln	Thr	Leu	Ile	Leu	Leu	Thr	Asn	Leu	Leu	Gln	Glu
		995					1000					1005			
Glu	Phe	Val	Lys	Trp	Lys	Gly	Ser	Leu	Phe	Phe	Arg	Phe	Val	Ser	
	1010					1015					1020				
Thr	Leu	Ile	Asp	Ser	His	Pro	Asp	Ile	Ala	Ser	Phe	Gly	Glu	Phe	
	1025					1030					1035				
Cys	Leu	Ala	His	Leu	Leu	Leu	Lys	Arg	Asn	Pro	Val	Met	Phe	Phe	
	1040					1045					1050				
Gln	His	Phe	Ile	Glu	Cys	Ile	Phe	His	Phe	Asn	Asn	Tyr	Glu	Lys	
	1055					1060					1065				
His	Glu	Lys	Tyr	Asn	Lys	Phe	Pro	Gln	Ser	Glu	Arg	Glu	Lys	Arg	
	1070					1075					1080				
Leu	Phe	Ser	Leu	Lys	Gly	Lys	Ser	Asn	Lys	Glu	Arg	Arg	Met	Lys	
	1085					1090					1095				
Ile	Tyr	Lys	Phe	Leu	Leu	Glu	His	Phe	Thr	Asp	Glu	Gln	Arg	Phe	
	1100					1105					1110				
Asn	Ile	Thr	Ser	Lys	Ile	Cys	Leu	Ser	Ile	Leu	Ala	Cys	Phe	Ala	
	1115					1120					1125				
Asp	Gly	Ile	Leu	Pro	Leu	Asp	Leu	Asp	Ala	Ser	Glu	Leu	Leu	Ser	
	1130					1135					1140				
Asp	Thr	Phe	Glu	Val	Leu	Ser	Ser	Lys	Glu	Ile	Lys	Leu	Leu	Ala	
	1145					1150					1155				
Met	Arg	Ser	Lys	Pro	Asp	Lys	Asp	Leu	Leu	Met	Glu	Glu	Asp	Asp	
	1160					1165					1170				
Met	Ala	Leu	Ala	Asn	Val	Val	Met	Gln	Glu	Ala	Gln	Lys	Lys	Leu	
	1175					1180					1185				
Ile	Ser	Gln	Val	Gln	Lys	Arg	Asn	Phe	Ile	Glu	Asn	Ile	Ile	Pro	
	1190					1195					1200				
Ile	Ile	Ile	Ser	Leu	Lys	Thr	Val	Leu	Glu	Lys	Asn	Lys	Ile	Pro	
	1205					1210					1215				
Ala	Leu	Arg	Glu	Leu	Met	His	Tyr	Leu	Arg	Glu	Val	Met	Gln	Asp	
	1220					1225					1230				
Tyr	Arg	Asp	Glu	Leu	Lys	Asp	Phe	Phe	Ala	Val	Asp	Lys	Gln	Leu	
	1235					1240					1245				

Ala Ser Glu Leu Glu Tyr Asp Met Lys Lys Tyr Gln Glu Gln Leu
 1250 1255 1260
 Val Gln Glu Gln Glu Leu Ala Lys His Ala Asp Val Ala Gly Thr
 1265 1270 1275
 Ala Gly Gly Ala Glu Val Ala Pro Val Ala Gln Val Ala Leu Cys
 1280 1285 1290
 Leu Glu Thr Val Pro Val Pro Ala Gly Gln Glu Asn Pro Ala Met
 1295 1300 1305
 Ser Pro Ala Val Ser Gln Pro Cys Thr Pro Arg Ala Ser Ala Gly
 1310 1315 1320
 His Val Ala Val Ser Ser Pro Thr Pro Glu Thr Gly Pro Leu Gln
 1325 1330 1335
 Arg Leu Leu Pro Lys Ala Arg Pro Met Ser Leu Ser Thr Ile Ala
 1340 1345 1350
 Ile Leu Asn Ser Val Lys Lys Ala Val Glu Ser Lys Ser Arg His
 1355 1360 1365
 Arg Ser Arg Ser Leu Gly Val Leu Pro Phe Thr Leu Asn Ser Gly
 1370 1375 1380
 Ser Pro Glu Lys Thr Cys Ser Gln Val Ser Ser Tyr Ser Leu Glu
 1385 1390 1395
 Gln Glu Ser Asn Gly Glu Ile Glu His Val Thr Lys Arg Ala Ile
 1400 1405 1410
 Ser Thr Pro Glu Lys Ser Ile Ser Asp Val Thr Phe Gly Ala Gly
 1415 1420 1425
 Val Ser Tyr Ile Gly Thr Pro Arg Thr Pro Ser Ser Ala Lys Glu
 1430 1435 1440
 Lys Ile Glu Gly Arg Ser Gln Gly Asn Asp Ile Leu Cys Leu Ser
 1445 1450 1455
 Leu Pro Asp Lys Pro Pro Pro Gln Pro Gln Gln Trp Asn Val Arg
 1460 1465 1470
 Ser Pro Ala Arg Asn Lys Asp Thr Pro Ala Cys Ser Arg Arg Ser
 1475 1480 1485
 Leu Arg Lys Thr Pro Leu Lys Thr Ala Asn
 1490 1495

<210> 270
 <211> 551
 <212> PRT
 <213> Homo sapiens
 <400> 270

Met Pro Thr Pro Gly Ala Ala Ser Leu Leu Ser Ala Val Gln Ala Gln
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 Glu Arg Arg Leu Tyr Val Pro Leu Pro Gly Gly Phe Ser Val Pro Pro
 20 25 30
 Val Thr Pro Met Pro His Cys Leu Leu Asp Pro Lys Glu Asp Leu Lys
 35 40 45
 Gly Cys Pro Gln Ala Cys Ser Gly Cys Ser Met Gly Thr Pro Ala Pro
 50 55 60
 Ser Tyr Leu Val Gln Gly Ala Gln Gly Met Pro Leu Arg Lys Ala Ala
 65 70 75 80
 Ser Leu Ala Thr Lys Leu Glu Glu Met Gly Leu Phe Gly Gln Gln Cys
 85 90 95
 Leu Pro Ala Met Gly Tyr Thr Cys Arg Cys Arg Glu Pro Leu Leu Leu
 100 105 110
 Pro Ser His Leu Ile Gly Val Gly Phe Pro Gln Ala Pro Ala Pro Gln
 115 120 125
 Leu Leu Ser Ala Leu Leu Leu Pro Ala Pro Pro Ser Pro Ala Gln
 130 135 140
 Ser Glu Val His Pro Pro Val Arg Gly Ala Glu Gln Cys Cys Lys Leu
 145 150 155 160
 Ser Ala Pro Glu Tyr Pro Gly Asp Leu Leu Asn Cys Thr Phe Ser Phe
 165 170 175
 Cys Lys Pro Glu Leu Ser Leu Cys Thr Ser Asn Leu Leu Pro Gly Asn
 180 185 190
 Ala Ala Val Thr Glu Gln Ser Gly Lys Val Leu Asp Asn Thr Leu Gly
 195 200 205
 Gly Asn Phe Ser Leu Lys Cys Ile Gly Ala Glu Thr Arg Thr Pro Cys
 210 215 220
 Gln Ala Ala Leu Trp Val Phe Glu Ala Lys Val Ser Arg Leu Met Lys

225 Ser Ala Ser Cys Gln Arg Gln Arg Ile His Trp Gln Gln Gly Ala Leu 240
 245 Ala Ala Val Arg Gln Gly Asp Leu Gly Leu Lys Tyr Lys Glu Ile Ser 255
 260 Cys Lys Asp Ala Gly Val Phe His Gly Thr Ser Ser Ser Gly Lys Leu 270
 275 His Ser His Gly Lys Thr Leu Glu Pro Glu Ser Gly Lys Ala Ile Arg 285
 290 Ala Trp Ile Leu Glu Ile Leu Ser Ser Cys Lys Pro Gly Ser Leu Val 300
 305 Gln Met Ala Lys Asn Met Thr Met Asp Arg Ala Cys Ala Tyr Leu Val 315
 325 Thr Cys Arg Glu Ala Thr Leu Trp Trp Gly Val Val Ala Gly Ser Leu 335
 340 Val Tyr Glu His Gly Asn Gln Lys Pro Ile Pro Val Thr Val Trp Arg 350
 355 Gly Gly Glu Arg Arg Gly Met Val Pro Thr Lys Lys Asp Thr Ser Thr 365
 370 Ser Val Leu Phe Ile Gln Ile His Val Leu Thr Phe Ser Ala Glu Asn 380
 385 Lys Ile Gln Ser Asn Cys Asn Ser Ser Ser Cys Ile Arg Pro Thr Gly 395
 405 Arg Arg Glu Arg Asp Val Thr Asn Gln Thr His Ala Ser Gly Lys Arg 415
 420 Cys Val Ala Gly Leu Ala Pro Glu Gly Ser Asp Glu Gly Leu Leu Pro 430
 435 Ala Thr Leu Pro Cys Leu Gly Phe Pro Lys Leu Leu Ser Ala Glu Glu 445
 450 Arg Ala Asn His Gly Gln Pro Arg Asn Thr Arg Pro Cys Gln Leu Asp 460
 465 Leu Asp Cys Ala Ile Phe Gly His Phe His Thr Leu Pro Asn Lys Leu 475
 485 Leu Leu Val Ser Val Ser Glu Ile Leu Thr Ser Glu Ile Leu Thr Leu 495
 500 Ala Asn Leu Leu Gln Gly Cys Gln His Glu Pro Glu Arg Tyr Gly His 510
 515 Val Thr Asp Pro Glu His Lys Thr Thr Ser Ala Phe Thr Val Ser Lys 525
 530 Ala Ser Arg Trp Arg Lys Asn 535 540
 545 550

<210> 271
 <211> 2779
 <212> PRT
 <213> Homo sapiens
 <400> 271

Met Gln Gly Asp Leu Lys Thr Thr Asp Ile Ser Ile Glu Pro Pro Ser
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 Ala Gln Leu Glu Val Gln Ala Gly Gln Val Asp Leu Lys Leu Pro Glu
 20 25 30
 Gly His Val Pro Glu Gly Ala Gly Leu Lys Gly His Leu Pro Lys Leu
 35 40 45
 Gln Met Pro Ser Phe Lys Met Pro Lys Val Asp Arg Lys Gly Pro Gln
 50 55 60
 Ile Asp Val Lys Gly Pro Lys Leu Asp Leu Lys Gly Pro Lys Thr Asp
 65 70 75 80
 Val Thr Ala Pro Asp Val Glu Val Ser Gln Pro Gly Met Glu Val Asp
 85 90 95
 Val Glu Ala Pro Gly Ala Lys Leu Asp Gly Ala Arg Leu Glu Gly Asp
 100 105 110
 Leu Ser Leu Ala Asp Lys Asp Val Thr Ala Lys Asp Ser Lys Phe Lys
 115 120 125
 Met Pro Lys Phe Lys Met Pro Ser Phe Gly Val Ser Ala Pro Gly Lys
 130 135 140
 Ser Ile Glu Val Leu Val Asp Val Ser Ala Pro Lys Val Glu Ala Asp
 145 150 155 160
 Leu Ser Leu Pro Ser Met Gln Gly Asp Leu Lys Asn Thr Asp Ile Ser
 165 170 175

Ile Glu Pro Pro Ser Ala Gln Leu Glu Val Gln Ala Gly Gln Val Asp
 180 185 190
 Val Lys Leu Pro Glu Gly His Val Leu Glu Gly Ala Gly Leu Lys Gly
 195 200 205
 His Leu Pro Lys Leu Gln Met Pro Ser Phe Lys Met Pro Lys Val Asp
 210 215 220
 Arg Lys Gly Pro Gln Ile Asp Ile Lys Gly Pro Lys Leu Asp Leu Lys
 225 230 235 240
 Gly Pro Lys Met Asp Val Thr Ala Pro Asp Val Glu Val Ser Gln Pro
 245 250 255
 Ser Met Glu Val Asp Val Glu Ala Pro Gly Ala Lys Leu Asp Gly Ala
 260 265 270
 Arg Leu Glu Gly Asp Leu Ser Leu Ala Asp Lys Asp Val Thr Ala Lys
 275 280 285
 Asp Ser Lys Phe Lys Met Pro Lys Phe Lys Met Pro Ser Tyr Arg Ala
 290 295 300 320
 Ser Ala Pro Gly Lys Ser Ile Gln Ala Ser Val Asp Val Ser Ala Pro
 305 310 315 335
 Lys Ala Glu Ala Asp Val Ser Leu Pro Ser Met Gln Gly Asp Leu Lys
 325 330 340 350
 Thr Thr Asp Leu Ser Ile Gln Leu Pro Ser Val Asp Leu Glu Val Gln
 340 345 355 365
 Ala Gly Gln Val Asp Val Lys Leu Pro Glu Gly His Val Pro Glu Gly
 355 360 370 380
 Ala Gly Leu Lys Gly His Leu Pro Lys Val Glu Met Pro Ser Phe Lys
 370 375 385 400
 Met Pro Lys Val Asp Leu Lys Ser Pro Gln Val Asp Ile Lys Gly Pro
 385 390 395 415
 Lys Leu Asp Leu Lys Val Pro Lys Ala Glu Val Thr Val Pro Asp Val
 405 410 420 430
 Glu Val Ser Leu Pro Ser Val Glu Val Asp Val Gln Ala Pro Arg Ala
 420 425 435 445
 Lys Leu Asp Gly Ala Arg Leu Glu Gly Asp Leu Ser Leu Ala Glu Lys
 435 440 450 460
 Asp Val Thr Ala Lys Asp Ser Lys Phe Lys Met Pro Lys Phe Lys Met
 450 455 465 480
 Pro Ser Phe Gly Val Ser Ala Pro Gly Arg Ser Ile Glu Ala Ser Leu
 465 470 475 495
 Asp Val Ser Ala Pro Lys Val Glu Ala Asp Val Ser Leu Ser Ser Met
 485 490 500 510
 Gln Gly Asp Leu Lys Ala Thr Asp Leu Ser Ile Gln Pro Pro Ser Ala
 500 505 515 525
 Asp Leu Glu Val Gln Ala Val Gln Val Asp Val Glu Leu Leu Glu Gly
 515 520 530 540
 Pro Val Pro Glu Gly Ala Gly Leu Lys Gly His Leu Pro Lys Val Glu
 530 535 545 560
 Met Pro Ser Leu Lys Thr Pro Lys Val Asp Leu Lys Gly Pro Gln Ile
 545 550 555 575
 Asp Val Lys Gly Pro Lys Leu Asp Leu Lys Gly Pro Lys Ala Glu Val
 565 570 580 590
 Arg Val Pro Asp Val Glu Val Ser Leu Pro Ser Val Glu Val Asp Val
 580 585 595 605
 Gln Ala Pro Lys Ala Lys Leu Asp Ala Gly Arg Leu Glu Gly Asp Leu
 595 600 610 620
 Ser Leu Ala Asp Lys Asp Val Thr Ala Lys Asp Ser Lys Phe Lys Met
 610 615 625 640
 Pro Lys Phe Lys Met Pro Ser Phe Arg Val Ser Ala Pro Gly Lys Ser
 625 630 635 655
 Met Glu Ala Ser Val Asp Val Ser Ala Pro Lys Val Glu Ala Asp Val
 645 650 660 670
 Ser Leu Pro Ser Met Gln Gly Asp Leu Lys Thr Thr Asp Leu Ser Ile
 660 665 675 685
 Gln Pro Pro Ser Ala Asp Leu Lys Val Gln Ala Gly Gln Met Asp Val
 675 680 690 700
 Lys Leu Pro Glu Gly Gln Val Pro Glu Gly Ala Gly Leu Lys Glu His
 690 695 705 715
 Leu Pro Lys Val Glu Met Pro Ser Leu Lys Met Pro Lys Val Asp Leu
 705 710 715 720
 Lys Gly Pro Gln Val Asp Ile Lys Gly Pro Lys Leu Asp Leu Lys Val

				725					730				735		
Ser	Lys	Ala	Glu	Val	Thr	Ala	Pro	Asp	Val	Glu	Val	Ser	Leu	Pro	Ser
			740					745					750		
Val	Glu	Val	Asp	Val	Gln	Ala	Pro	Arg	Ala	Lys	Leu	Asp	Ser	Ala	Gln
			755					760					765		
Leu	Glu	Gly	Asp	Leu	Ser	Leu	Ala	Asp	Lys	Asp	Val	Thr	Ala	Lys	Asp
			770					775					780		
Ser	Lys	Phe	Lys	Met	Pro	Lys	Phe	Lys	Met	Pro	Ser	Phe	Gly	Val	Ser
					790					795					800
Ala	Pro	Gly	Lys	Ser	Ile	Glu	Ala	Ser	Val	His	Val	Ser	Ala	Pro	Lys
				805					810						815
Val	Glu	Ala	Asp	Val	Ser	Leu	Pro	Ser	Met	Gln	Gly	Asp	Leu	Lys	Thr
			820						825						830
Thr	Asp	Leu	Ser	Ile	Gln	Pro	His	Ser	Ala	Asp	Leu	Thr	Val	Gln	Ala
			835					840							845
Arg	Gln	Val	Asp	Met	Lys	Leu	Leu	Glu	Gly	His	Val	Pro	Glu	Glu	Ala
			850					855					860		
Gly	Leu	Lys	Gly	His	Leu	Pro	Lys	Val	Gln	Met	Pro	Ser	Phe	Lys	Met
					870					875					880
Pro	Lys	Val	Asp	Leu	Lys	Gly	Pro	Glu	Ile	Asp	Ile	Lys	Gly	Pro	Lys
				885					890						895
Leu	Asp	Leu	Lys	Asp	Pro	Lys	Val	Glu	Val	Thr	Ala	Pro	Asp	Val	Glu
			900						905						910
Val	Ser	Leu	Pro	Ser	Val	Glu	Val	Asp	Val	Glu	Ala	Pro	Gly	Ala	Lys
			915					920							925
Leu	Asp	Gly	Ala	Arg	Leu	Glu	Gly	Asp	Leu	Ser	Leu	Ala	Asp	Lys	Asp
			930					935					940		
Met	Thr	Ala	Lys	Asp	Ser	Lys	Phe	Lys	Met	Pro	Lys	Phe	Lys	Met	Pro
					950					955					960
Ser	Phe	Gly	Val	Ser	Ala	Pro	Gly	Lys	Ser	Met	Glu	Ala	Ser	Val	Asp
				965					970						975
Val	Thr	Ala	Pro	Lys	Val	Glu	Ala	Asp	Val	Ser	Leu	Pro	Ser	Met	Gln
				980					985						990
Gly	Asp	Leu	Lys	Ala	Thr	Asp	Leu	Ser	Val	Gln	Pro	Pro	Ser	Ala	Asp
			995				1000						1005		
Leu	Glu	Val	Gln	Ala	Gly	Gln	Val	Asp	Val	Lys	Leu	Pro	Glu	Gly	
	1010					1015					1020				
Pro	Val	Pro	Glu	Gly	Ala	Ser	Leu	Lys	Gly	His	Leu	Pro	Lys	Val	
	1025					1030					1035				
Gln	Met	Pro	Ser	Phe	Lys	Met	Pro	Lys	Val	Asp	Leu	Lys	Gly	Pro	
	1040					1045					1050				
Gln	Ile	Asp	Val	Lys	Gly	Pro	Lys	Leu	Asp	Leu	Lys	Gly	Pro	Lys	
	1055					1060					1065				
Ala	Glu	Val	Thr	Ala	Pro	Asp	Val	Lys	Met	Ser	Leu	Ser	Ser	Met	
	1070					1075					1080				
Glu	Val	Asp	Val	Gln	Ala	Pro	Arg	Ala	Lys	Leu	Asp	Gly	Val	Gln	
	1085					1090					1095				
Leu	Glu	Gly	Asp	Leu	Ser	Leu	Ala	Asp	Lys	Asp	Val	Thr	Ala	Lys	
	1100					1105					1110				
Asp	Ser	Lys	Phe	Lys	Met	Pro	Lys	Phe	Lys	Met	Pro	Ser	Phe	Gly	
	1115					1120					1125				
Val	Ser	Ala	Pro	Gly	Lys	Ser	Met	Glu	Ala	Ser	Val	Asp	Val	Ser	
	1130					1135					1140				
Glu	Leu	Lys	Ala	Lys	Ala	Asp	Val	Ser	Leu	Pro	Ser	Met	Gln	Gly	
	1145					1150					1155				
Asp	Leu	Lys	Thr	Thr	Asp	Leu	Ser	Ile	Gln	Ser	Pro	Ser	Ala	Asp	
	1160					1165					1170				
Leu	Glu	Val	Gln	Ala	Gly	Gln	Val	Asp	Val	Lys	Leu	Pro	Glu	Gly	
	1175					1180					1185				
Pro	Leu	Pro	Lys	Gly	Ala	Gly	Leu	Lys	Gly	His	Leu	Pro	Lys	Val	
	1190					1195					1200				
Gln	Met	Pro	Cys	Leu	Lys	Met	Pro	Lys	Val	Ala	Leu	Lys	Gly	Pro	
	1205					1210					1215				
Gln	Val	Asp	Val	Lys	Gly	Pro	Lys	Leu	Asp	Leu	Lys	Gly	Pro	Lys	
	1220					1225					1230				
Ala	Asp	Val	Met	Thr	Pro	Val	Val	Glu	Val	Ser	Leu	Pro	Ser	Met	
	1235					1240					1245				
Glu	Val	Asp	Val	Glu	Ala	Pro	Gly	Ala	Lys	Leu	Asp	Ser	Val	Arg	
	1250					1255									

Leu	Glu	Gly	Asp	Leu	Ser	Leu	Ala	Asp	Lys	Asp	Met	Thr	Ala	Lys
1265						1270					1275			
Asp	Ser	Lys	Phe	Lys	Met	Pro	Lys	Phe	Lys	Met	Pro	Ser	Phe	Gly
1280						1285					1290			
Val	Ser	Ala	Pro	Gly	Lys	Ser	Ile	Glu	Ala	Ser	Leu	Asp	Val	Ser
1295						1300					1305			
Ala	Leu	Lys	Val	Glu	Ala	Asp	Val	Ser	Leu	Pro	Ser	Met	Gln	Gly
1310						1315					1320			
Asp	Leu	Lys	Thr	Thr	His	Leu	Ser	Ile	Gln	Pro	Pro	Ser	Ala	Asp
1325						1330					1335			
Leu	Glu	Val	Gln	Ala	Gly	Gln	Glu	Asp	Val	Lys	Leu	Pro	Glu	Gly
1340						1345					1350			
Pro	Val	His	Glu	Gly	Ala	Gly	Leu	Lys	Gly	His	Leu	Pro	Lys	Leu
1355						1360					1365			
Gln	Met	Pro	Ser	Phe	Lys	Val	Pro	Lys	Val	Asp	Leu	Lys	Gly	Pro
1370						1375					1380			
Gln	Ile	Asp	Val	Asn	Val	Pro	Lys	Leu	Asp	Leu	Lys	Gly	Pro	Lys
1385						1390					1395			
Val	Glu	Val	Thr	Ser	Pro	Asn	Leu	Asp	Val	Ser	Leu	Pro	Ser	Met
1400						1405					1410			
Glu	Val	Asp	Ile	Gln	Ala	Pro	Gly	Ala	Lys	Leu	Asp	Ser	Thr	Arg
1415						1420					1425			
Leu	Glu	Gly	Asp	Leu	Ser	Leu	Ala	Asp	Lys	Asp	Val	Thr	Ala	Lys
1430						1435					1440			
Asp	Ser	Lys	Phe	Lys	Met	Pro	Lys	Phe	Lys	Met	Pro	Ser	Phe	Gly
1445						1450					1455			
Met	Leu	Ser	Pro	Gly	Lys	Ser	Ile	Glu	Val	Ser	Val	Asp	Val	Ser
1460						1465					1470			
Ala	Pro	Lys	Met	Glu	Ala	Asp	Met	Ser	Ile	Pro	Ser	Met	Gln	Gly
1475						1480					1485			
Asp	Leu	Lys	Thr	Thr	Asp	Leu	Arg	Ile	Gln	Ala	Pro	Ser	Ala	Asp
1490						1495					1500			
Leu	Glu	Val	Gln	Ala	Gly	Gln	Val	Asp	Leu	Lys	Leu	Pro	Glu	Gly
1505						1510					1515			
His	Met	Pro	Glu	Val	Ala	Gly	Leu	Lys	Gly	His	Leu	Pro	Lys	Val
1520						1525					1530			
Glu	Met	Pro	Ser	Phe	Lys	Met	Pro	Lys	Val	Asp	Leu	Lys	Gly	Pro
1535						1540					1545			
Gln	Val	Asp	Val	Lys	Gly	Pro	Lys	Leu	Asp	Leu	Lys	Gly	Pro	Lys
1550						1555					1560			
Ala	Glu	Val	Met	Ala	Pro	Asp	Val	Glu	Val	Ser	Leu	Pro	Ser	Val
1565						1570					1575			
Glu	Thr	Asp	Val	Gln	Ala	Pro	Gly	Ser	Met	Leu	Asp	Gly	Ala	Arg
1580						1585					1590			
Leu	Glu	Gly	Asp	Leu	Ser	Leu	Ala	His	Glu	Asp	Val	Ala	Gly	Lys
1595						1600					1605			
Asp	Ser	Lys	Phe	Gln	Gly	Pro	Lys	Leu	Ser	Thr	Ser	Gly	Phe	Glu
1610						1615					1620			
Trp	Ser	Ser	Lys	Lys	Val	Ser	Met	Ser	Ser	Ser	Glu	Ile	Glu	Gly
1625						1630					1635			
Asn	Val	Thr	Phe	His	Glu	Lys	Thr	Ser	Thr	Phe	Pro	Ile	Val	Glu
1640						1645					1650			
Ser	Val	Val	His	Glu	Gly	Asp	Leu	His	Asp	Pro	Ser	Arg	Asp	Gly
1655						1660					1665			
Asn	Leu	Gly	Leu	Ala	Val	Gly	Glu	Val	Gly	Met	Asp	Ser	Lys	Phe
1670						1675					1680			
Lys	Lys	Leu	His	Phe	Lys	Val	Pro	Lys	Val	Ser	Phe	Ser	Ser	Thr
1685						1690					1695			
Lys	Thr	Pro	Lys	Asp	Ser	Leu	Val	Pro	Gly	Ala	Lys	Ser	Ser	Ile
1700						1705					1710			
Gly	Leu	Ser	Thr	Ile	Pro	Leu	Ser	Ser	Ser	Glu	Cys	Ser	Ser	Phe
1715						1720					1725			
Glu	Leu	Gln	Gln	Val	Ser	Ala	Cys	Ser	Glu	Pro	Ser	Met	Gln	Met
1730						1735					1740			
Pro	Lys	Val	Gly	Phe	Ala	Gly	Phe	Pro	Ser	Ser	Arg	Leu	Asp	Leu
1745						1750					1755			
Thr	Gly	Pro	His	Phe	Glu	Ser	Ser	Ile	Leu	Ser	Pro	Cys	Glu	Asp
1760						1765					1770			
Val	Thr	Leu	Thr	Lys	Tyr	Gln	Val	Thr	Val	Pro	Arg	Ala	Ala	Leu

1775	Ala Pro Glu Leu Ala Leu	1780	Glu Ile Pro Ser Gly	1785	Ser Gln Ala Asp
1790	Ile Pro Leu Pro Lys Thr	1795	Glu Cys Ser Thr Asp	1800	Leu Gln Pro Pro
1805	Glu Gly Val Pro Thr Ser	1810	Gln Ala Glu Ser His	1815	Ser Gly Pro Leu
1820	Asn Ser Met Ile Pro Val	1825	Ser Leu Gly Gln Val	1830	Ser Phe Pro Lys
1835	Phe Tyr Lys Pro Lys Phe	1840	Val Phe Ser Val Pro	1845	Gln Met Ala Val
1850	Pro Glu Gly Asp Leu His	1855	Ala Val Gly Ala	1860	Pro Val Met Ser
1865	Pro Leu Ser Pro Gly Glu	1870	Arg Val Gln Cys Pro	1875	Leu Pro Ser Thr
1880	Gln Leu Pro Ser Pro Gly	1885	Thr Cys Val Ser Gln	1890	Gly Pro Glu Glu
1895	Leu Val Ala Ser Leu Gln	1900	Thr Ser Val Val Ala	1905	Pro Gly Glu Ala
1910	Pro Ser Glu Asp Ala Asp	1915	His Glu Gly Lys Gly	1920	Ser Pro Leu Lys
1925	Met Pro Lys Ile Lys Leu	1930	Pro Ser Phe Arg Trp	1935	Ser Pro Lys Lys
1940	Glu Thr Gly Pro Lys Val	1945	Asp Pro Glu Cys Ser	1950	Val Glu Asp Ser
1955	Lys Leu Ser Leu Val Leu	1960	Asp Lys Asp Glu Val	1965	Ala Pro Gln Ser
1970	Ala Ile His Met Asp Leu	1975	Pro Pro Glu Arg Asp	1980	Gly Glu Lys Gly
1985	Arg Ser Thr Lys Pro Gly	1990	Phe Ala Met Pro Lys	1995	Leu Ala Leu Pro
2000	Lys Met Lys Ala Ser Lys	2005	Ser Gly Val Ser Leu	2010	Pro Gln Arg Asp
2015	Val Asp Pro Ser Leu Ser	2020	Ser Ala Thr Ala Gly	2025	Gly Ser Phe Gln
2030	Asp Thr Glu Lys Ala Ser	2035	Ser Asp Gly Gly Arg	2040	Gly Gly Leu Gly
2045	Ala Thr Ala Ser Ala Thr	2050	Gly Ser Glu Gly Val	2055	Asn Leu His Arg
2060	Pro Gln Val His Ile Pro	2065	Ser Leu Gly Phe Ala	2070	Lys Pro Asp Leu
2075	Arg Ser Ser Lys Ala Lys	2080	Val Glu Val Ser Gln	2085	Pro Glu Ala Asp
2090	Leu Pro Leu Pro Lys His	2095	Asp Leu Ser Thr Glu	2100	Gly Asp Ser Arg
2105	Gly Cys Gly Leu Gly Asp	2110	Val Pro Val Ser Gln	2115	Pro Cys Gly Glu
2120	Gly Ile Ala Pro Thr Pro	2125	Glu Asp Pro Leu Gln	2130	Pro Ser Cys Arg
2135	Lys Pro Asp Ala Glu Val	2140	Leu Thr Val Glu Ser	2145	Pro Glu Glu Glu
2150	Ala Met Thr Lys Tyr Ser	2155	Gln Glu Ser Trp Phe	2160	Lys Met Pro Lys
2165	Phe Arg Met Pro Ser Leu	2170	Arg Arg Ser Phe Arg	2175	Asp Arg Gly Gly
2180	Ala Gly Lys Leu Glu Val	2185	Ala Gln Thr Gln Ala	2190	Pro Ala Ala Thr
2195	Gly Gly Glu Ala Ala Ala	2200	Lys Val Lys Glu Phe	2205	Leu Val Ser Gly
2210	Ser Asn Val Glu Ala Ala	2215	Met Ser Leu Gln Leu	2220	Pro Glu Ala Asp
2225	Ala Glu Val Thr Ala Ser	2230	Glu Ser Lys Ser Ser	2235	Thr Asp Ile Leu
2240	Arg Cys Asp Leu Asp Ser	2245	Thr Gly Leu Lys Leu	2250	His Leu Ser Thr
2255	Ala Gly Met Thr Gly Asp	2260	Glu Leu Ser Thr Ser	2265	Glu Val Arg Ile
2270	His Pro Ser Lys Gly Pro	2275	Leu Pro Phe Gln Met	2280	Pro Gly Met Arg
2285		2290		2295	

Leu	Pro	Glu	Thr	Gln	Val	Leu	Pro	Gly	Glu	Ile	Asp	Glu	Thr	Pro
2300						2305					2310			
Leu	Ser	Lys	Pro	Gly	His	Asp	Leu	Ala	Ser	Met	Glu	Asp	Lys	Thr
2315						2320					2325			
Glu	Lys	Trp	Ser	Ser	Gln	Pro	Glu	Gly	Pro	Leu	Lys	Leu	Lys	Ala
2330						2335					2340			
Ser	Ser	Thr	Asp	Met	Pro	Ser	Gln	Ile	Ser	Val	Val	Asn	Val	Asp
2345						2350					2355			
Gln	Leu	Trp	Glu	Asp	Ser	Val	Leu	Thr	Val	Lys	Phe	Pro	Lys	Leu
2360						2365					2370			
Met	Val	Pro	Arg	Phe	Ser	Phe	Pro	Ala	Pro	Ser	Ser	Glu	Asp	Asp
2375						2380					2385			
Val	Phe	Ile	Pro	Thr	Val	Arg	Glu	Val	Gln	Cys	Pro	Glu	Ala	Asn
2390						2395					2400			
Ile	Asp	Thr	Ala	Leu	Cys	Lys	Glu	Ser	Pro	Gly	Leu	Trp	Gly	Ala
2405						2410					2415			
Ser	Ile	Leu	Lys	Ala	Gly	Ala	Gly	Val	Pro	Gly	Glu	Gln	Pro	Val
2420						2425					2430			
Asp	Leu	Asn	Leu	Pro	Leu	Glu	Ala	Pro	Pro	Ile	Ser	Lys	Val	Arg
2435						2440					2445			
Val	His	Ile	Gln	Gly	Ala	Gln	Val	Glu	Ser	Gln	Glu	Val	Thr	Ile
2450						2455					2460			
His	Ser	Ile	Val	Thr	Pro	Glu	Phe	Val	Asp	Leu	Ser	Val	Pro	Arg
2465						2470					2475			
Thr	Phe	Ser	Thr	Gln	Ile	Val	Arg	Glu	Ser	Glu	Ile	Pro	Thr	Ser
2480						2485					2490			
Glu	Ile	Gln	Thr	Pro	Ser	Tyr	Gly	Phe	Ser	Leu	Leu	Lys	Val	Lys
2495						2500					2505			
Ile	Pro	Glu	Pro	His	Thr	Gln	Ala	Arg	Val	Tyr	Thr	Thr	Met	Thr
2510						2515					2520			
Gln	His	Ser	Arg	Thr	Gln	Glu	Gly	Thr	Glu	Glu	Ala	Pro	Ile	Gln
2525						2530					2535			
Ala	Thr	Pro	Gly	Val	Asp	Ser	Ile	Ser	Gly	Asp	Leu	Gln	Pro	Asp
2540						2545					2550			
Thr	Gly	Glu	Pro	Phe	Glu	Met	Ile	Ser	Ser	Ser	Val	Asn	Val	Leu
2555						2560					2565			
Gly	Gln	Gln	Thr	Leu	Thr	Phe	Glu	Val	Pro	Ser	Gly	His	Gln	Leu
2570						2575					2580			
Ala	Asp	Ser	Cys	Ser	Asp	Glu	Glu	Pro	Ala	Glu	Ile	Leu	Glu	Phe
2585						2590					2595			
Pro	Pro	Asp	Asp	Ser	Gln	Glu	Ala	Thr	Thr	Pro	Leu	Ala	Asp	Glu
2600						2605					2610			
Gly	Arg	Ala	Pro	Lys	Asp	Lys	Pro	Glu	Ser	Lys	Lys	Ser	Gly	Leu
2615						2620					2625			
Leu	Trp	Phe	Trp	Leu	Pro	Asn	Ile	Gly	Phe	Ser	Ser	Ser	Val	Asp
2630						2635					2640			
Glu	Thr	Gly	Val	Asp	Ser	Lys	Asn	Asp	Val	Gln	Arg	Ser	Ala	Pro
2645						2650					2655			
Ile	Gln	Thr	Gln	Pro	Glu	Ala	Arg	Pro	Glu	Ala	Glu	Leu	Pro	Lys
2660						2665					2670			
Lys	Gln	Glu	Lys	Ala	Gly	Trp	Phe	Arg	Phe	Pro	Lys	Leu	Gly	Phe
2675						2680					2685			
Ser	Ser	Ser	Pro	Thr	Lys	Lys	Ser	Lys	Ser	Thr	Glu	Asp	Gly	Ala
2690						2695					2700			
Glu	Leu	Glu	Glu	Gln	Lys	Leu	Gln	Glu	Glu	Thr	Ile	Thr	Phe	Phe
2705						2710					2715			
Asp	Ala	Arg	Glu	Ser	Phe	Ser	Pro	Glu	Glu	Lys	Glu	Glu	Gly	Glu
2720						2725					2730			
Leu	Ile	Gly	Pro	Val	Gly	Thr	Gly	Leu	Asp	Ser	Arg	Val	Met	Val
2735						2740					2745			
Thr	Ser	Ala	Ala	Arg	Thr	Glu	Leu	Ile	Leu	Pro	Glu	Gln	Asp	Arg
2750						2755					2760			
Lys	Ala	Asp	Asp	Glu	Ser	Lys	Gly	Ser	Gly	Leu	Gly	Pro	Asn	Glu
2765						2770					2775			
Gly														

<210> 272

<211> 512

<212> PRT
 <213> Homo sapiens
 <400> 272

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Met Asp Phe Glu Ser Gly Gln Val Asp Pro Leu Ala Ser Val Ile Leu
1      5      10      15
Pro Pro Asn Leu Leu Glu Asn Leu Ser Pro Glu Asp Ser Val Leu Val
20      25      30
Arg Arg Ala Gln Phe Thr Phe Phe Asn Lys Thr Gly Leu Phe Gln Asp
35      40      45
Val Gly Pro Gln Arg Lys Thr Leu Val Ser Tyr Val Met Ala Cys Ser
50      55      60
Ile Gly Asn Ile Thr Ile Gln Asn Leu Lys Asp Pro Val Gln Ile Lys
65      70      75      80
Ile Lys His Thr Arg Thr Gln Glu Val His His Pro Ile Cys Ala Phe
85      90      95
Trp Asp Leu Asn Lys Asn Lys Ser Phe Gly Gly Trp Asn Thr Ser Gly
100     105     110
Cys Val Ala His Arg Asp Ser Asp Ala Ser Glu Thr Val Cys Leu Cys
115     120     125
Asn His Phe Thr His Phe Gly Val Leu Met Asp Leu Pro Arg Ser Ala
130     135     140
Ser Gln Leu Asp Ala Arg Asn Thr Lys Val Leu Thr Phe Ile Ser Tyr
145     150     155     160
Ile Gly Cys Gly Ile Ser Ala Ile Phe Ser Ala Ala Thr Leu Leu Thr
165     170     175
Tyr Val Ala Phe Glu Lys Leu Arg Arg Asp Tyr Pro Ser Lys Ile Leu
180     185     190
Met Asn Leu Ser Thr Ala Leu Leu Phe Leu Asn Leu Leu Phe Leu Leu
195     200     205
Asp Gly Trp Ile Thr Ser Phe Asn Val Asp Gly Leu Cys Ile Ala Val
210     215     220
Ala Val Leu Leu His Phe Phe Leu Leu Ala Thr Phe Thr Trp Met Gly
225     230     235     240
Leu Glu Ala Ile His Met Tyr Ile Ala Leu Val Lys Val Phe Asn Thr
245     250     255
Tyr Ile Arg Arg Tyr Ile Leu Lys Phe Cys Ile Ile Gly Trp Gly Leu
260     265     270
Pro Ala Leu Val Val Ser Val Val Leu Ala Ser Arg Asn Asn Asn Glu
275     280     285
Val Tyr Gly Lys Glu Ser Tyr Gly Lys Glu Lys Gly Asp Glu Phe Cys
290     295     300
Trp Ile Gln Asp Pro Val Ile Phe Tyr Val Thr Cys Ala Gly Tyr Phe
305     310     315     320
Gly Val Met Phe Phe Leu Asn Ile Ala Met Phe Ile Val Val Met Val
325     330     335
Gln Ile Cys Gly Arg Asn Gly Lys Arg Ser Asn Arg Thr Leu Arg Glu
340     345     350
Glu Val Leu Arg Asn Leu Arg Ser Val Val Ser Leu Thr Phe Leu Leu
355     360     365
Gly Met Thr Trp Gly Phe Ala Phe Phe Ala Trp Gly Pro Leu Asn Ile
370     375     380
Pro Phe Met Tyr Leu Phe Ser Ile Phe Asn Ser Leu Gln Gly Leu Phe
385     390     395     400
Ile Phe Ile Phe His Cys Ala Met Lys Glu Asn Val Gln Lys Gln Trp
405     410     415
Arg Arg His Leu Cys Cys Gly Arg Phe Arg Leu Ala Asp Asn Ser Asp
420     425     430
Trp Ser Lys Thr Ala Thr Asn Ile Ile Lys Lys Ser Ser Asp Asn Leu
435     440     445
Gly Lys Ser Leu Ser Ser Ser Ser Ile Gly Ser Asn Ser Thr Tyr Leu
450     455     460
Thr Ser Lys Ser Lys Ser Ser Ser Thr Thr Tyr Phe Lys Arg Asn Ser
465     470     475     480
His Thr Asp Asn Val Ser Tyr Glu His Ser Phe Asn Lys Ser Gly Ser
485     490     495
Leu Arg Gln Cys Phe His Gly Gln Val Leu Val Lys Thr Gly Pro Cys
500     505     510

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<210> 273

<211> 355
 <212> PRT
 <213> Homo sapiens
 <400> 273

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Met Ala Ala Pro Ala Phe Glu Pro Gly Arg Gln Ser Asp Leu Leu Val
1      5      10      15
Lys Leu Asn Arg Leu Met Glu Arg Cys Leu Arg Asn Ser Lys Cys Ile
20      25      30
Asp Thr Glu Ser Leu Cys Val Val Ala Gly Glu Lys Val Trp Gln Ile
35      40      45
Arg Val Asp Leu His Leu Leu Asn His Asp Gly Asn Ile Ile Asp Ala
50      55      60
Ala Ser Ile Ala Ala Ile Val Ala Leu Cys His Phe Arg Arg Pro Asp
65      70      75      80
Val Ser Val Gln Gly Asp Glu Val Thr Leu Tyr Thr Pro Glu Glu Arg
85      90      95
Asp Pro Val Pro Leu Ser Ile His His Met Pro Ile Cys Val Ser Phe
100     105     110
Ala Phe Phe Gln Gln Gly Thr Tyr Leu Leu Val Asp Pro Asn Glu Arg
115     120     125
Glu Glu Arg Val Met Asp Gly Leu Leu Val Ile Ala Met Asn Lys His
130     135     140
Arg Glu Ile Cys Thr Ile Gln Ser Ser Gly Gly Ile Met Leu Leu Lys
145     150     155     160
Asp Gln Val Leu Arg Cys Ser Lys Ile Ala Gly Val Lys Val Ala Glu
165     170     175
Ile Thr Glu Leu Ile Leu Lys Ala Leu Glu Asn Asp Gln Lys Val Arg
180     185     190
Lys Glu Gly Lys Phe Gly Phe Ala Glu Ser Ile Ala Asn Gln Arg
195     200     205
Ile Thr Ala Phe Lys Met Glu Lys Ala Pro Ile Asp Thr Ser Asp Val
210     215     220
Glu Glu Lys Ala Glu Glu Ile Ile Ala Glu Ala Glu Pro Pro Ser Glu
225     230     235     240
Val Val Ser Thr Pro Val Leu Trp Thr Pro Gly Thr Ala Gln Ile Gly
245     250     255
Glu Gly Val Glu Asn Ser Trp Gly Asp Leu Glu Asp Ser Glu Lys Glu
260     265     270
Asp Asp Glu Gly Gly Asp Gln Ala Ile Ile Leu Asp Gly Ile Lys
275     280     285
Met Asp Thr Gly Val Glu Val Ser Asp Ile Gly Ser Gln Asp Ala Pro
290     295     300
Ile Ile Leu Ser Asp Ser Glu Glu Glu Glu Met Ile Ile Leu Glu Pro
305     310     315     320
Asp Lys Asn Pro Lys Lys Ile Arg Thr Gln Thr Thr Ser Ala Lys Gln
325     330     335
Glu Lys Ala Pro Ser Lys Lys Pro Val Lys Arg Arg Lys Lys Lys Arg
340     345     350
Ala Ala Asn
355

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<210> 274
 <211> 940
 <212> PRT
 <213> Homo sapiens
 <400> 274

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Met Ile Leu Glu Gln Tyr Val Val Val Ser Asn Tyr Lys Lys Gln Glu
1      5      10      15
Asn Ser Glu Leu Ser Leu Gln Ala Gly Glu Val Val Asp Val Ile Glu
20      25      30
Lys Asn Glu Ser Gly Trp Trp Phe Val Ser Thr Ser Glu Glu Gln Gly
35      40      45
Trp Val Pro Ala Thr Tyr Leu Glu Ala Gln Asn Gly Thr Arg Asp Asp
50      55      60
Ser Asp Ile Asn Thr Ser Lys Thr Gly Glu Glu Lys Tyr Val Thr
65      70      75      80
Val Gln Pro Tyr Thr Ser Gln Ser Lys Asp Glu Ile Gly Phe Glu Lys
85      90      95
Gly Val Thr Val Glu Val Ile Arg Lys Asn Leu Glu Gly Trp Trp Tyr

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Ala Tyr Gln Lys Val Gln Asp Ser Glu Ile Ser Phe Pro Ala Gly Val
 660 665 670
 Glu Val Gln Val Leu Glu Lys Gln Glu Ser Gly Trp Trp Tyr Val Arg
 675 680 685
 Phe Gly Glu Leu Glu Gly Trp Ala Pro Ser His Tyr Leu Val Leu Asp
 690 695 700
 Glu Asn Glu Gln Pro Asp Pro Ser Gly Lys Glu Leu Asp Thr Val Pro
 705 710 715 720
 Ala Lys Gly Arg Gln Asn Glu Gly Lys Ser Asp Ser Leu Glu Lys Ile
 725 730 735
 Glu Arg Arg Val Gln Ala Leu Asn Thr Val Asn Gln Ser Lys Lys Ala
 740 745 750
 Thr Pro Pro Ile Pro Ser Lys Pro Pro Gly Gly Phe Gly Lys Thr Ser
 755 760 765
 Gly Thr Pro Ala Val Lys Met Arg Asn Gly Val Arg Gln Val Ala Val
 770 775 780
 Arg Pro Gln Ser Val Phe Val Ser Pro Pro Pro Lys Asp Asn Asn Leu
 785 790 795 800
 Ser Cys Ala Leu Arg Arg Asn Glu Ser Leu Thr Ala Thr Asp Gly Leu
 805 810 815
 Arg Gly Val Arg Arg Asn Ser Ser Phe Ser Thr Ala Arg Ser Ala Ala
 820 825 830
 Ala Glu Ala Lys Gly Arg Leu Ala Glu Arg Ala Ala Ser Gln Gly Ser
 835 840 845
 Asp Ser Pro Leu Leu Pro Ala Gln Arg Asn Ser Ile Pro Val Ser Pro
 850 855 860
 Val Arg Pro Lys Pro Ile Glu Lys Ser Gln Phe Ile His Asn Asn Leu
 865 870 875 880
 Lys Asp Val Tyr Val Ser Ile Ala Asp Tyr Glu Gly Asp Glu Glu Thr
 885 890 895
 Ala Gly Phe Gln Glu Gly Val Ser Met Glu Val Leu Glu Arg Asn Pro
 900 905 910
 Asn Gly Trp Trp Tyr Cys Gln Ile Leu Asp Gly Val Lys Pro Phe Lys
 915 920 925
 Gly Trp Val Pro Ser Asn Tyr Leu Glu Lys Lys Asn
 930 935 940

<210> 275
 <211> 871
 <212> PRT
 <213> Homo sapiens
 <400> 275

Met Lys Tyr Ser Cys Cys Ala Leu Val Leu Ala Val Leu Gly Thr Glu
 1 5 10 15
 Leu Leu Gly Ser Leu Cys Ser Thr Val Arg Ser Pro Arg Phe Arg Gly
 20 25 30
 Arg Ile Gln Gln Glu Arg Lys Asn Ile Arg Pro Asn Ile Ile Leu Val
 35 40 45
 Pro Thr Asp Asp Gln Asp Val Glu Leu Gly Ser Leu Gln Val Met Asn
 50 55 60
 Lys Thr Arg Lys Ile Met Glu His Gly Gly Ala Thr Phe Ile Asn Ala
 65 70 75 80
 Phe Val Thr Thr Pro Met Cys Cys Pro Ser Arg Ser Ser Met Leu Thr
 85 90 95
 Gly Lys Tyr Val His Asn His Asn Val Tyr Thr Asn Asn Glu Asn Cys
 100 105 110
 Ser Ser Pro Ser Trp Gln Ala Met His Glu Pro Arg Thr Phe Ala Val
 115 120 125
 Tyr Leu Asn Asn Thr Gly Tyr Arg Thr Ala Phe Phe Gly Lys Tyr Leu
 130 135 140
 Asn Glu Tyr Asn Gly Ser Tyr Ile Pro Pro Gly Trp Arg Glu Trp Leu
 145 150 155 160
 Gly Leu Ile Lys Asn Ser Arg Phe Tyr Asn Tyr Thr Val Cys Arg Asn
 165 170 175
 Gly Ile Lys Glu Lys His Gly Phe Asp Tyr Ala Lys Asp Tyr Phe Thr
 180 185 190
 Asp Leu Ile Thr Asn Glu Ser Ile Asn Tyr Phe Lys Met Ser Lys Arg
 195 200 205
 Met Tyr Pro His Arg Pro Val Met Met Val Ile Ser His Ala Ala Pro

210
 His Gly Pro Glu Asp Ser Ala Pro Gln Phe Ser Lys Leu Tyr Pro Asn
 225
 Ala Ser Gln His Ile Thr Pro Ser Tyr Asn Tyr Ala Pro Asn Met Asp
 240
 Lys His Trp Ile Met Gln Tyr Thr Gly Pro Met Leu Pro Ile His Met
 255
 Glu Phe Thr Asn Ile Leu Gln Arg Lys Arg Leu Gln Thr Leu Met Ser
 270
 Val Asp Asp Ser Val Glu Arg Leu Tyr Asn Met Leu Val Glu Thr Gly
 285
 Glu Leu Glu Asn Thr Tyr Ile Ile Tyr Thr Ala Asp His Gly Tyr His
 300
 305 Ile Gly Gln Phe Gly Leu Val Lys Gly Lys Ser Met Pro Tyr Asp Phe
 315
 Asp Ile Arg Val Pro Phe Phe Ile Arg Gly Pro Ser Val Glu Pro Gly
 330
 Ser Ile Val Pro Gln Ile Val Leu Asn Ile Asp Leu Ala Pro Thr Ile
 345
 Leu Asp Ile Ala Gly Leu Asp Thr Pro Pro Asp Val Asp Gly Lys Ser
 360
 Val Leu Lys Leu Leu Asp Pro Glu Lys Pro Gly Asn Arg Phe Arg Thr
 375
 385 Asn Lys Lys Ala Lys Ile Trp Arg Asp Thr Phe Leu Val Glu Arg Gly
 390
 Lys Phe Leu Arg Lys Lys Glu Glu Ser Ser Lys Asn Ile Gln Gln Ser
 405
 Asn His Leu Pro Lys Tyr Glu Arg Val Lys Glu Leu Cys Gln Gln Ala
 420
 Arg Tyr Gln Thr Ala Cys Glu Gln Pro Gly Gln Lys Trp Gln Cys Ile
 435
 Glu Asp Thr Ser Gly Lys Leu Arg Ile His Lys Cys Lys Gly Pro Ser
 450
 465 Asp Leu Leu Thr Val Arg Gln Ser Thr Arg Asn Leu Tyr Ala Arg Gly
 470
 Phe His Asp Lys Asp Lys Glu Cys Ser Cys Arg Glu Ser Gly Tyr Arg
 485
 Ala Ser Arg Ser Gln Arg Lys Ser Gln Arg Gln Phe Leu Arg Asn Gln
 500
 Gly Thr Pro Lys Tyr Lys Pro Arg Phe Val His Thr Arg Gln Thr Arg
 515
 Ser Leu Ser Val Glu Phe Glu Gly Glu Ile Tyr Asp Ile Asn Leu Glu
 530
 545 Glu Glu Glu Glu Leu Gln Val Leu Gln Pro Arg Asn Ile Ala Lys Arg
 550
 His Asp Glu Gly His Lys Gly Pro Arg Asp Leu Gln Ala Ser Ser Gly
 565
 Gly Asn Arg Gly Arg Met Leu Ala Asp Ser Ser Asn Ala Val Gly Pro
 580
 Pro Thr Thr Val Arg Val Thr His Lys Cys Phe Ile Leu Pro Asn Asp
 595
 Ser Ile His Cys Glu Arg Glu Leu Tyr Gln Ser Ala Arg Ala Trp Lys
 610
 625 Asp His Lys Ala Tyr Ile Asp Lys Glu Ile Glu Ala Leu Gln Asp Lys
 630
 Ile Lys Asn Leu Arg Glu Val Arg Gly His Leu Lys Arg Arg Lys Pro
 645
 Glu Glu Cys Ser Cys Ser Lys Gln Ser Tyr Tyr Asn Lys Glu Lys Gly
 660
 Val Lys Lys Gln Glu Lys Leu Lys Ser His Leu His Pro Phe Lys Glu
 675
 690 Ala Ala Gln Glu Val Asp Ser Lys Leu Gln Leu Phe Lys Glu Asn Asn
 705
 Arg Arg Arg Lys Lys Glu Arg Lys Glu Lys Arg Arg Gln Arg Lys Gly
 710
 Glu Glu Cys Ser Leu Pro Gly Leu Thr Cys Phe Thr His Asp Asn Asn
 725
 His Trp Gln Thr Ala Pro Phe Trp Asn Leu Gly Ser Phe Cys Ala Cys
 740
 755

Thr Ser Ser Asn Asn Asn Thr Tyr Trp Cys Leu Arg Thr Val Asn Glu
 770 775 780
 Thr His Asn Phe Leu Phe Cys Glu Phe Ala Thr Gly Phe Leu Glu Tyr
 785 790 795 800
 Phe Asp Met Asn Thr Asp Pro Tyr Gln Leu Thr Asn Thr Val His Thr
 805 810 815
 Val Glu Arg Gly Ile Leu Asn Gln Leu His Val Gln Leu Met Glu Leu
 820 825 830
 Arg Ser Cys Gln Gly Tyr Lys Gln Cys Asn Pro Arg Pro Lys Asn Leu
 835 840 845
 Asp Val Gly Asn Lys Asp Gly Gly Ser Tyr Asp Leu His Arg Gly Gln
 850 855 860
 Leu Trp Asp Gly Trp Glu Gly
 865 870

<210> 276
 <211> 1426
 <212> PRT
 <213> Homo sapiens
 <400> 276

Met Asn Asp Trp His Arg Ile Phe Thr Gln Asn Val Leu Val Pro Pro
 1 5 10 15
 His Pro Gln Arg Ala Arg Gln Pro Trp Lys Glu Ser Thr Ala Phe Gln
 20 25 30
 Cys Val Leu Lys Trp Leu Asp Gly Pro Val Ile Arg Gln Gly Val Leu
 35 40 45
 Glu Val Leu Ser Glu Val Glu Cys His Leu Arg Val Ser Phe Phe Asp
 50 55 60
 Val Thr Tyr Arg His Phe Phe Gly Arg Thr Trp Lys Thr Thr Val Lys
 65 70 75 80
 Pro Thr Lys Arg Pro Pro Ser Arg Ile Val Phe Asn Glu Pro Leu Tyr
 85 90 95
 Phe His Thr Ser Leu Asn His Pro His Ile Val Ala Val Val Glu Val
 100 105 110
 Val Ala Glu Gly Lys Lys Arg Asp Gly Ser Leu Gln Thr Leu Ser Cys
 115 120 125
 Gly Phe Gly Ile Leu Arg Ile Phe Ser Asn Gln Pro Asp Ser Pro Ile
 130 135 140
 Ser Ala Ser Gln Asp Lys Arg Leu Arg Leu Tyr His Gly Thr Pro Arg
 145 150 155 160
 Ala Leu Leu His Pro Leu Leu Gln Asp Pro Ala Glu Gln Asn Arg His
 165 170 175
 Met Thr Leu Ile Glu Asn Cys Ser Leu Gln Tyr Thr Leu Lys Pro His
 180 185 190
 Pro Ala Leu Glu Pro Ala Phe His Leu Leu Pro Glu Asn Leu Leu Val
 195 200 205
 Ser Gly Leu Gln Gln Ile Pro Gly Leu Leu Pro Ala His Gly Glu Ser
 210 215 220
 Gly Asp Ala Leu Arg Lys Pro Arg Leu Gln Lys Pro Ile Thr Gly His
 225 230 235 240
 Leu Asp Asp Leu Phe Phe Thr Leu Tyr Pro Ser Leu Glu Lys Phe Glu
 245 250 255
 Glu Glu Leu Leu Glu Leu His Val Gln Asp His Phe Gln Glu Gly Cys
 260 265 270
 Gly Pro Leu Asp Gly Gly Ala Leu Glu Ile Leu Glu Arg Arg Leu Arg
 275 280 285
 Val Gly Val His Asn Gly Leu Gly Phe Val Gln Arg Pro Gln Val Val
 290 295 300
 Val Leu Val Pro Glu Met Asp Val Ala Leu Thr Arg Ser Ala Ser Phe
 305 310 315 320
 Ser Arg Lys Val Val Ser Ser Ser Lys Thr Ser Ser Gly Ser Gln Ala
 325 330 335
 Leu Val Leu Arg Ser Arg Leu Arg Leu Pro Glu Met Val Gly His Pro
 340 345 350
 Ala Phe Ala Val Ile Phe Gln Leu Glu Tyr Val Phe Ser Ser Pro Ala
 355 360 365
 Gly Val Asp Gly Asn Ala Ala Ser Val Thr Ser Leu Ser Asn Leu Ala
 370 375 380
 Cys Met His Met Val Arg Trp Ala Val Trp Asn Pro Leu Leu Glu Ala

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Arg Thr Gln His Leu Arg Asp Leu Gln Val Ile Ala Ala Tyr Arg Glu
 945 950 955 960
 Arg Thr Lys Ala Glu Ser Ile Ala Ser Leu Leu Ser Leu Ala Ile Thr
 965 970 975
 Thr Glu His Thr Leu His Ala Thr Leu Gly Val Ala Glu Phe Phe Glu
 980 985 990
 Phe Val Leu Lys Asn Pro His Asn Thr Gln His Thr Val Thr Val Glu
 995 1000 1005
 Ile Asp Asn Pro Glu Leu Ser Val Ile Val Asp Ser Gln Glu Trp
 1010 1015 1020
 Arg Asp Phe Lys Gly Ala Ala Gly Leu His Thr Pro Val Glu Glu
 1025 1030 1035
 Asp Met Phe His Leu Arg Gly Ser Leu Ala Pro Gln Leu Tyr Leu
 1040 1045 1050
 Arg Pro His Glu Thr Ala His Val Pro Phe Lys Phe Gln Ser Phe
 1055 1060 1065
 Ser Ala Gly Gln Leu Ala Met Val Gln Ala Ser Pro Gly Leu Ser
 1070 1075 1080
 Asn Glu Lys Gly Met Asp Ala Val Ser Pro Trp Lys Ser Ser Ala
 1085 1090 1095
 Val Pro Thr Lys His Ala Lys Val Leu Phe Arg Ala Ser Gly Gly
 1100 1105 1110
 Lys Pro Ile Ala Val Leu Cys Leu Thr Val Glu Leu Gln Pro His
 1115 1120 1125
 Val Val Asp Gln Val Phe Arg Phe Tyr His Pro Glu Leu Ser Phe
 1130 1135 1140
 Leu Lys Lys Ala Ile Arg Leu Pro Pro Trp His Thr Phe Pro Gly
 1145 1150 1155
 Ala Pro Val Gly Met Leu Gly Glu Asp Pro Pro Val His Val Arg
 1160 1165 1170
 Cys Ser Asp Pro Asn Val Ile Cys Glu Thr Gln Asn Val Gly Pro
 1175 1180 1185
 Gly Glu Pro Arg Asp Ile Phe Leu Lys Val Ala Ser Gly Pro Ser
 1190 1195 1200
 Pro Glu Ile Lys Asp Phe Phe Val Ile Ile Tyr Ser Asp Arg Trp
 1205 1210 1215
 Leu Ala Thr Pro Thr Gln Thr Trp Gln Val Tyr Leu His Ser Leu
 1220 1225 1230
 Gln Arg Val Asp Val Ser Cys Val Ala Gly Gln Leu Thr Arg Leu
 1235 1240 1245
 Ser Leu Val Leu Arg Gly Thr Gln Thr Val Arg Lys Val Arg Ala
 1250 1255 1260
 Phe Thr Ser His Pro Gln Glu Leu Lys Thr Asp Pro Lys Gly Val
 1265 1270 1275
 Phe Val Leu Pro Pro Arg Gly Val Gln Asp Leu His Val Gly Val
 1280 1285 1290
 Arg Pro Leu Arg Ala Gly Ser Arg Phe Val His Leu Asn Leu Val
 1295 1300 1305
 Asp Val Asp Cys His Gln Leu Val Ala Ser Trp Leu Val Cys Leu
 1310 1315 1320
 Cys Cys Arg Gln Pro Leu Ile Ser Lys Ala Phe Glu Ile Met Leu
 1325 1330 1335
 Ala Ala Gly Glu Gly Lys Gly Val Asn Lys Arg Ile Thr Tyr Thr
 1340 1345 1350
 Asn Pro Tyr Pro Ser Arg Arg Thr Phe His Leu His Ser Asp His
 1355 1360 1365
 Pro Glu Leu Leu Arg Phe Arg Glu Asp Ser Phe Gln Val Gly Gly
 1370 1375 1380
 Gly Glu Thr Tyr Thr Ile Gly Leu Gln Phe Ala Pro Ser Gln Arg
 1385 1390 1395
 Val Gly Glu Glu Glu Ile Leu Ile Tyr Ile Asn Asp His Glu Asp
 1400 1405 1410
 Lys Asn Glu Glu Ala Phe Cys Val Lys Val Ile Tyr Gln
 1415 1420 1425

<210> 277

<211> 146

<212> PRT

<213> Homo sapiens

<400> 277

Met Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly
 1 5 10 15
 Val Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile
 20 25 30
 Val Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys
 35 40 45
 Leu Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu
 50 55 60
 Gly Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn
 65 70 75 80
 Phe Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser
 85 90 95
 Lys Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe
 100 105 110
 Gln Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln
 115 120 125
 Gln Ile Pro Val Phe Lys Leu Ser Gly Glu Asn Gly Asp Glu Val Lys
 130 135 140
 Lys Glu
 145

<210> 278

<211> 402

<212> PRT

<213> Homo sapiens

<400> 278

Met Lys Glu Thr Arg Gly Tyr Gly Gly Asp Ala Pro Phe Cys Thr Arg
 1 5 10 15
 Leu Asn His Ser Tyr Thr Gly Met Trp Ala Pro Glu Arg Ser Ala Glu
 20 25 30
 Ala Arg Gly Asn Leu Thr Arg Pro Pro Gly Ser Gly Glu Asp Cys Gly
 35 40 45
 Ser Val Ser Val Ala Phe Pro Ile Thr Met Leu Leu Thr Gly Phe Val
 50 55 60
 Gly Asn Ala Leu Ala Met Leu Leu Val Ser Arg Ser Tyr Arg Arg Arg
 65 70 75 80
 Glu Ser Lys Arg Lys Lys Ser Phe Leu Leu Cys Ile Gly Trp Leu Ala
 85 90 95
 Leu Thr Asp Leu Val Gly Gln Leu Leu Thr Thr Pro Val Val Ile Val
 100 105 110
 Val Tyr Leu Ser Lys Gln Arg Trp Glu His Ile Asp Pro Ser Gly Arg
 115 120 125
 Leu Cys Thr Phe Phe Gly Leu Thr Met Thr Val Phe Gly Leu Ser Ser
 130 135 140
 Leu Phe Ile Ala Ser Ala Met Ala Val Glu Arg Ala Leu Ala Ile Arg
 145 150 155 160
 Ala Pro His Trp Tyr Ala Ser His Met Lys Thr Arg Ala Thr Arg Ala
 165 170 175
 Val Leu Leu Gly Val Trp Leu Ala Val Leu Ala Phe Ala Leu Leu Pro
 180 185 190
 Val Leu Gly Val Gly Gln Tyr Thr Val Gln Trp Pro Gly Thr Trp Cys
 195 200 205
 Phe Ile Ser Thr Gly Arg Gly Gly Asn Gly Thr Ser Ser Ser His Asn
 210 215 220
 Trp Gly Asn Leu Phe Phe Ala Ser Ala Phe Ala Phe Leu Gly Leu Leu
 225 230 235 240
 Ala Leu Thr Val Thr Phe Ser Cys Asn Leu Ala Thr Ile Lys Ala Leu
 245 250 255
 Val Ser Arg Cys Arg Ala Lys Ala Thr Ala Ser Gln Ser Ser Ala Gln
 260 265 270
 Trp Gly Arg Ile Thr Thr Glu Thr Ala Ile Gln Leu Met Gly Ile Met
 275 280 285
 Cys Val Leu Ser Val Cys Trp Ser Pro Leu Leu Ile Met Met Leu Lys
 290 295 300
 Met Ile Phe Asn Gln Thr Ser Val Glu His Cys Lys Thr His Thr Glu
 305 310 315 320
 Lys Gln Lys Glu Cys Asn Phe Phe Leu Ile Ala Val Arg Leu Ala Ser
 325 330 335

Leu Asn Gln Ile Leu Asp Pro Trp Val Tyr Leu Leu Leu Arg Lys Ile
 340 345 350
 Leu Leu Arg Lys Phe Cys Gln Met Arg Lys Arg Arg Leu Arg Glu Gln
 355 360 365
 Glu Met Gly Pro Asp Gly Arg Cys Phe Cys His Ala Trp Arg Gln Val
 370 375 380
 Pro Arg Thr Trp Cys Ser Ser His Asp Arg Glu Pro Cys Ser Val Gln
 385 390 395 400
 Leu Ser

<210> 279
 <211> 1741
 <212> PRT
 <213> Homo sapiens
 <400> 279

Met Arg Leu Leu Trp Gly Leu Ile Trp Ala Ser Ser Phe Phe Thr Leu
 1 5 10 15
 Ser Leu Gln Lys Pro Arg Leu Leu Leu Phe Ser Pro Ser Val Val His
 20 25 30
 Leu Gly Val Pro Leu Ser Val Gly Val Gln Leu Gln Asp Val Pro Arg
 35 40 45
 Gly Gln Val Val Lys Gly Ser Val Phe Leu Arg Asn Pro Ser Arg Asn
 50 55 60
 Asn Val Pro Cys Ser Pro Lys Val Asp Phe Thr Leu Ser Ser Glu Arg
 65 70 75 80
 Asp Phe Ala Leu Leu Ser Leu Gln Val Pro Leu Lys Asp Ala Lys Ser
 85 90 95
 Cys Gly Leu His Gln Leu Leu Arg Gly Pro Glu Val Gln Leu Val Ala
 100 105 110
 His Ser Pro Trp Leu Lys Asp Ser Leu Ser Arg Thr Thr Asn Ile Gln
 115 120 125
 Gly Ile Asn Leu Leu Phe Ser Ser Arg Arg Gly His Leu Phe Leu Gln
 130 135 140
 Thr Asp Gln Pro Ile Tyr Asn Pro Gly Gln Arg Val Arg Tyr Arg Val
 145 150 155 160
 Phe Ala Leu Asp Gln Lys Met Arg Pro Ser Thr Asp Thr Ile Thr Val
 165 170 175
 Met Val Glu Asn Ser His Gly Leu Arg Val Arg Lys Lys Glu Val Tyr
 180 185 190
 Met Pro Ser Ser Ile Phe Gln Asp Asp Phe Val Ile Pro Asp Ile Ser
 195 200 205
 Glu Pro Gly Thr Trp Lys Ile Ser Ala Arg Phe Ser Asp Gly Leu Glu
 210 215 220
 Ser Asn Ser Ser Thr Gln Phe Glu Val Lys Lys Tyr Val Leu Pro Asn
 225 230 235 240
 Phe Glu Val Lys Ile Thr Pro Gly Lys Pro Tyr Ile Leu Thr Val Pro
 245 250 255
 Gly His Leu Asp Glu Met Gln Leu Asp Ile Gln Ala Arg Tyr Ile Tyr
 260 265 270
 Gly Lys Pro Val Gln Gly Val Ala Tyr Val Arg Phe Gly Leu Leu Asp
 275 280 285
 Glu Asp Gly Lys Lys Thr Phe Phe Arg Gly Leu Glu Ser Gln Thr Lys
 290 295 300
 Leu Val Asn Gly Gln Ser His Ile Ser Leu Ser Lys Ala Glu Phe Gln
 305 310 315 320
 Asp Ala Leu Glu Lys Leu Asn Met Gly Ile Thr Asp Leu Gln Gly Leu
 325 330 335
 Arg Leu Tyr Val Ala Ala Ala Ile Ile Glu Ser Pro Gly Gly Glu Met
 340 345 350
 Glu Glu Ala Glu Leu Thr Ser Trp Tyr Phe Val Ser Ser Pro Phe Ser
 355 360 365
 Leu Asp Leu Ser Lys Thr Lys Arg His Leu Val Pro Gly Ala Pro Phe
 370 375 380
 Leu Leu Gln Ala Leu Val Arg Glu Met Ser Gly Ser Pro Ala Ser Gly
 385 390 395 400
 Ile Pro Val Lys Val Ser Ala Thr Val Ser Ser Pro Gly Ser Val Pro
 405 410 415
 Glu Ala Gln Asp Ile Gln Gln Asn Thr Asp Gly Ser Gly Gln Val Ser

420										425					430					
Ile	Pro	Ile	Ile	Pro	Gln	Thr	Ile	Ser	Glu	Leu	Gln	Leu	Ser	Val						
435										440					445					
Ser	Ala	Gly	Ser	Pro	His	Pro	Ala	Ile	Ala	Arg	Leu	Thr	Val	Ala	Ala					
450										455					460					
Pro	Pro	Ser	Gly	Gly	Pro	Gly	Phe	Leu	Ser	Ile	Glu	Arg	Pro	Asp	Ser					
465										470					475					
Arg	Pro	Pro	Arg	Val	Gly	Asp	Thr	Leu	Asn	Leu	Asn	Leu	Arg	Ala	Val					
485										490					495					
Gly	Ser	Gly	Ala	Thr	Phe	Ser	His	Tyr	Tyr	Tyr	Met	Ile	Leu	Ser	Arg					
500										505					510					
Gly	Gln	Ile	Val	Phe	Met	Asn	Arg	Glu	Pro	Lys	Arg	Thr	Leu	Thr	Ser					
515										520					525					
Val	Ser	Val	Phe	Val	Asp	His	His	Leu	Ala	Pro	Ser	Phe	Tyr	Phe	Val					
530										535					540					
Ala	Phe	Tyr	Tyr	His	Gly	Asp	His	Pro	Val	Ala	Asn	Ser	Leu	Arg	Val					
545										550					555					
Asp	Val	Gln	Ala	Gly	Ala	Cys	Glu	Gly	Lys	Leu	Glu	Leu	Ser	Val	Asp					
565										570					575					
Gly	Ala	Lys	Gln	Tyr	Arg	Asn	Gly	Glu	Ser	Val	Lys	Leu	His	Leu	Glu					
580										585					590					
Thr	Asp	Ser	Leu	Ala	Leu	Val	Ala	Leu	Gly	Ala	Leu	Asp	Thr	Ala	Leu					
595										600					605					
Tyr	Ala	Ala	Gly	Ser	Lys	Ser	His	Lys	Pro	Leu	Asn	Met	Gly	Lys	Val					
610										615					620					
Phe	Glu	Ala	Met	Asn	Ser	Tyr	Asp	Leu	Gly	Cys	Gly	Pro	Gly	Gly	Gly					
625										630					635					
Asp	Ser	Ala	Leu	Gln	Val	Phe	Gln	Ala	Ala	Gly	Leu	Ala	Phe	Ser	Asp					
645										650					655					
Gly	Asp	Gln	Trp	Thr	Leu	Ser	Arg	Lys	Arg	Leu	Ser	Cys	Pro	Lys	Glu					
660										665					670					
Lys	Thr	Thr	Arg	Lys	Lys	Arg	Asn	Val	Asn	Phe	Gln	Lys	Ala	Ile	Asn					
675										680					685					
Glu	Lys	Leu	Gly	Gln	Tyr	Ala	Ser	Pro	Thr	Ala	Lys	Arg	Cys	Cys	Gln					
690										695					700					
Asp	Gly	Val	Thr	Arg	Leu	Pro	Met	Met	Arg	Ser	Cys	Glu	Gln	Arg	Ala					
705										710					715					
Ala	Arg	Val	Gln	Gln	Pro	Asp	Cys	Arg	Glu	Pro	Phe	Leu	Ser	Cys	Cys					
725										730					735					
Gln	Phe	Ala	Glu	Ser	Leu	Arg	Lys	Lys	Ser	Arg	Asp	Lys	Gly	Gln	Ala					
740										745					750					
Gly	Leu	Gln	Arg	Ala	Leu	Glu	Ile	Leu	Gln	Glu	Glu	Asp	Leu	Ile	Asp					
755										760					765					
Glu	Asp	Asp	Ile	Pro	Val	Arg	Ser	Phe	Phe	Pro	Glu	Asn	Trp	Leu	Trp					
770										775					780					
Arg	Val	Glu	Thr	Val	Asp	Arg	Phe	Gln	Ile	Leu	Thr	Leu	Trp	Leu	Pro					
785										790					795					
Asp	Ser	Leu	Thr	Thr	Trp	Glu	Ile	His	Gly	Leu	Ser	Leu	Ser	Lys	Thr					
805										810					815					
Lys	Gly	Leu	Cys	Val	Ala	Thr	Pro	Val	Gln	Leu	Arg	Val	Phe	Arg	Glu					
820										825					830					
Phe	His	Leu	His	Leu	Arg	Leu	Pro	Met	Ser	Val	Arg	Arg	Phe	Glu	Gln					
835										840					845					
Leu	Glu	Leu	Arg	Pro	Val	Leu	Tyr	Asn	Tyr	Leu	Asp	Lys	Asn	Leu	Thr					
850										855					860					
Val	Ser	Val	His	Val	Ser	Pro	Val	Glu	Gly	Leu	Cys	Leu	Ala	Gly	Gly					
865										870					875					
Gly	Gly	Leu	Ala	Gln	Val	Leu	Val	Pro	Ala	Gly	Ser	Ala	Arg	Pro						
885										890					895					
Val	Ala	Phe	Ser	Val	Val	Pro	Thr	Ala	Ala	Ala	Ala	Val	Ser	Leu	Lys					
900										905					910					
Val	Val	Ala	Arg	Gly	Ser	Phe	Glu	Phe	Pro	Val	Gly	Asp	Ala	Val	Ser					
915										920					925					
Lys	Val	Leu	Gln	Ile	Glu	Lys	Glu	Gly	Ala	Ile	His	Arg	Glu	Glu	Leu					
930										935					940					
Val	Tyr	Glu	Leu	Asn	Pro	Leu	Asp	His	Arg	Gly	Arg	Thr	Leu	Glu	Ile					
945										950					955					
Pro	Gly	Asn	Ser	Asp	Pro	Asn	Met	Ile	Pro	Asp	Gly	Asp	Phe	Asn	Ser					
965										970					975					

Tyr Val Arg Val Thr Ala Ser Asp Pro Leu Asp Thr Leu Gly Ser Glu
 980 985 990
 Gly Ala Leu Ser Pro Gly Gly Val Ala Ser Leu Leu Arg Leu Pro Arg
 995 1000 1005
 Gly Cys Gly Glu Gln Thr Met Ile Tyr Leu Ala Pro Thr Leu Ala
 1010 1015 1020
 Ala Ser Arg Tyr Leu Asp Lys Thr Glu Gln Trp Ser Thr Leu Pro
 1025 1030 1035
 Pro Glu Thr Lys Asp His Ala Val Asp Leu Ile Gln Lys Gly Tyr
 1040 1045 1050
 Met Arg Ile Gln Gln Phe Arg Lys Ala Asp Gly Ser Tyr Ala Ala
 1055 1060 1065
 Trp Leu Ser Arg Asp Ser Ser Thr Trp Leu Thr Ala Phe Val Leu
 1070 1075 1080
 Lys Val Leu Ser Leu Ala Gln Glu Gln Val Gly Gly Ser Pro Glu
 1085 1090 1095
 Lys Leu Gln Glu Thr Ser Asn Trp Leu Leu Ser Gln Gln Gln Ala
 1100 1105 1110
 Asp Gly Ser Phe Gln Asp Pro Cys Pro Val Leu Asp Arg Ser Met
 1115 1120 1125
 Gln Gly Gly Leu Val Gly Asn Asp Glu Thr Val Ala Leu Thr Ala
 1130 1135 1140
 Phe Val Thr Ile Ala Leu His His Gly Leu Ala Val Phe Gln Asp
 1145 1150 1155
 Glu Gly Ala Glu Pro Leu Lys Gln Arg Val Glu Ala Ser Ile Ser
 1160 1165 1170
 Lys Ala Asn Ser Phe Leu Gly Glu Lys Ala Ser Ala Gly Leu Leu
 1175 1180 1185
 Gly Ala His Ala Ala Ala Ile Thr Ala Tyr Ala Leu Ser Leu Thr
 1190 1195 1200
 Lys Ala Pro Val Asp Leu Leu Gly Val Ala His Asn Asn Leu Met
 1205 1210 1215
 Ala Met Ala Gln Glu Thr Gly Asp Asn Leu Tyr Trp Gly Ser Val
 1220 1225 1230
 Thr Gly Ser Gln Ser Asn Ala Val Ser Pro Thr Pro Ala Pro Arg
 1235 1240 1245
 Asn Pro Ser Asp Pro Met Pro Gln Ala Pro Ala Leu Trp Ile Glu
 1250 1255 1260
 Thr Thr Ala Tyr Ala Leu Leu His Leu Leu Leu His Glu Gly Lys
 1265 1270 1275
 Ala Glu Met Ala Asp Gln Ala Ser Ala Trp Leu Thr Arg Gln Gly
 1280 1285 1290
 Ser Phe Gln Gly Gly Phe Arg Ser Thr Gln Asp Thr Val Ile Ala
 1295 1300 1305
 Leu Asp Ala Leu Ser Ala Tyr Trp Ile Ala Ser His Thr Thr Glu
 1310 1315 1320
 Glu Arg Gly Leu Asn Val Thr Leu Ser Ser Thr Gly Arg Asn Gly
 1325 1330 1335
 Phe Lys Ser His Ala Leu Gln Leu Asn Asn Arg Gln Ile Arg Gly
 1340 1345 1350
 Leu Glu Glu Glu Leu Gln Phe Ser Leu Gly Ser Lys Ile Asn Val
 1355 1360 1365
 Lys Val Gly Gly Asn Ser Lys Gly Thr Leu Lys Val Leu Arg Thr
 1370 1375 1380
 Tyr Asn Val Leu Asp Met Lys Asn Thr Thr Cys Gln Asp Leu Gln
 1385 1390 1395
 Ile Glu Val Thr Val Lys Gly His Val Glu Tyr Thr Met Glu Ala
 1400 1405 1410
 Asn Glu Asp Tyr Glu Tyr Asp Glu Leu Pro Ala Lys Asp Asp Pro
 1415 1420 1425
 Asp Ala Pro Leu Gln Pro Val Thr Pro Leu Gln Leu Phe Glu Gly
 1430 1435 1440
 Arg Arg Asn Arg Arg Arg Arg Glu Ala Pro Lys Val Val Glu Glu
 1445 1450 1455
 Gln Glu Ser Arg Val His Tyr Thr Val Cys Ile Trp Arg Asn Gly
 1460 1465 1470
 Lys Val Gly Leu Ser Gly Met Ala Ile Ala Asp Val Thr Leu Leu
 1475 1480 1485
 Ser Gly Phe His Ala Leu Arg Ala Asp Leu Glu Lys Leu Thr Ser

1490	Leu Ser Asp Arg Tyr Val	1495	Ser His Phe Glu Thr	1500	Glu Gly Pro His
1505	Val Leu Leu Tyr Phe Asp	1510	Val Pro Thr Ser	1515	Arg Glu Cys Val
1520	Gly Phe Glu Ala Val Gln	1525	Glu Val Pro Val Gly	1530	Leu Val Gln Pro
1535	Ala Ser Ala Thr Leu Tyr	1540	Asp Tyr Tyr Asn Pro	1545	Glu Arg Arg Cys
1550	Ser Val Phe Tyr Gly Ala	1555	Pro Ser Lys Ser Arg	1560	Leu Ala Thr
1565	Leu Cys Ser Ala Glu Val	1570	Cys Gln Cys Ala Glu	1575	Gly Lys Cys Pro
1580	Arg Gln Arg Arg Ala Leu	1585	Glu Arg Gly Leu Gln	1590	Asp Glu Asp Gly
1595	Tyr Arg Met Lys Phe Ala	1600	Cys Tyr Tyr Pro Arg	1605	Val Glu Tyr Gly
1610	Phe Gln Val Lys Val Leu	1615	Arg Glu Asp Ser Arg	1620	Ala Ala Phe Arg
1625	Leu Phe Glu Thr Lys Ile	1630	Thr Gln Val Leu His	1635	Phe Thr Lys Asp
1640	Val Lys Ala Ala Ala Asn	1645	Gln Met Arg Asn Phe	1650	Leu Val Arg Ala
1655	Ser Cys Arg Leu Arg Leu	1660	Glu Pro Gly Lys Glu	1665	Tyr Leu Ile Met
1670	Gly Leu Asp Gly Ala Thr	1675	Tyr Asp Leu Glu Gly	1680	His Pro Gln Tyr
1685	Leu Leu Asp Ser Asn Ser	1690	Trp Ile Glu Glu Met	1695	Pro Ser Glu Arg
1700	Leu Cys Arg Ser Thr Arg	1705	Gln Arg Ala Ala Cys	1710	Ala Gln Leu Asn
1715	Asp Phe Leu Gln Glu Tyr	1720	Gly Thr Gln Gly Cys	1725	Gln Val
1730		1735		1740	

<210> 280
 <211> 2150
 <212> PRT
 <213> Homo sapiens
 <400> 280

Met Tyr Pro Asn Trp Gly Arg Tyr Gly Gly Ser Ser His Tyr Pro Pro	1	5	10	15
Pro Pro Val Pro Pro Pro Pro Val Ala Leu Pro Glu Ala Ser Pro	20	25	30	35
Gly Pro Gly Tyr Ser Ser Ser Thr Pro Ala Ala Pro Ser Ser Ser	40	45	50	55
Gly Phe Met Ser Phe Arg Glu Gln His Leu Ala Gln Leu Gln Gln Leu	60	65	70	75
Gln Gln Met His Gln Lys Gln Met Gln Cys Val Leu Gln Pro His His	80	85	90	95
Leu Pro Pro Pro Pro Leu Pro Pro Pro Pro Val Met Pro Gly Gly Gly	100	105	110	115
Tyr Gly Asp Trp Gln Pro Pro Pro Pro Met Pro Pro Pro Pro Gly	120	125	130	135
Pro Ala Leu Ser Tyr Gln Lys Gln Gln Tyr Lys His Gln Met Leu	140	145	150	155
His His Gln Arg Asp Gly Pro Pro Gly Leu Val Pro Met Glu Leu Glu	160	165	170	175
Ser Pro Pro Glu Ser Pro Val Pro Pro Gly Ser Tyr Met Pro Pro	180	185	190	195
Ser Gln Ser Tyr Met Pro Pro Pro Gln Pro Pro Pro Ser Tyr Tyr Pro	200	205	210	215
Pro Thr Ser Ser Gln Pro Tyr Leu Pro Pro Ala Gln Pro Ser Pro Ser	220	225	230	235
Gln Ser Pro Pro Ser Gln Ser Tyr Leu Ala Pro Thr Pro Ser Tyr Ser	240	245	250	255
Ser Ser Ser Ser Ser Gln Ser Tyr Leu Ser His Ser Gln Ser Tyr	260	265	270	275
Leu Pro Ser Ser Gln Ala Ser Pro Ser Arg Pro Ser Gln Gly His Ser	280	285	290	295

Lys Ser Gln Leu Leu Ala Pro Pro Pro Pro Ser Ala Pro Pro Gly Asn
 245 250 255
 Lys Thr Thr Val Gln Gln Glu Pro Leu Glu Ser Gly Ala Lys Asn Lys
 260 265 270
 Ser Thr Glu Gln Gln Gln Ala Ala Pro Glu Pro Asp Pro Ser Thr Met
 275 280 285
 Thr Pro Gln Glu Gln Gln Gln Tyr Trp Tyr Arg Gln His Leu Leu Ser
 290 295 300
 Leu Gln Gln Arg Thr Lys Val His Leu Pro Gly His Lys Lys Gly Pro
 305 310 315 320
 Val Val Ala Lys Asp Thr Pro Glu Pro Val Lys Glu Glu Val Thr Val
 325 330 335
 Pro Ala Thr Ser Gln Val Pro Glu Ser Pro Ser Ser Glu Glu Pro Pro
 340 345 350
 Leu Pro Pro Pro Asn Glu Glu Val Pro Pro Pro Leu Pro Pro Glu Glu
 355 360 365
 Pro Gln Ser Glu Asp Pro Glu Glu Asp Ala Arg Leu Lys Gln Leu Gln
 370 375 380
 Ala Ala Ala Ala His Trp Gln Gln His Gln Gln His Arg Val Gly Phe
 385 390 395 400
 Gln Tyr Gln Gly Ile Met Gln Lys His Thr Gln Leu Gln Gln Ile Leu
 405 410 415
 Gln Gln Tyr Gln Gln Ile Ile Gln Pro Pro Pro His Ile Gln Thr Met
 420 425 430
 Ser Val Asp Met Gln Leu Arg His Tyr Glu Met Gln Gln Gln Gln Phe
 435 440 445
 Gln His Leu Tyr Gln Glu Trp Glu Arg Glu Phe Gln Leu Trp Glu Glu
 450 455 460
 Gln Leu His Ser Tyr Pro His Lys Asp Gln Leu Gln Glu Tyr Glu Lys
 465 470 475 480
 Gln Trp Lys Thr Trp Gln Gly His Met Lys Ala Thr Gln Ser Tyr Leu
 485 490 495
 Gln Glu Lys Val Asn Ser Phe Gln Asn Met Lys Asn Gln Tyr Met Gly
 500 505 510
 Asn Met Ser Met Pro Pro Pro Phe Val Pro Tyr Ser Gln Met Pro Pro
 515 520 525
 Pro Leu Pro Thr Met Pro Pro Pro Val Leu Pro Pro Ser Leu Pro Pro
 530 535 540
 Pro Val Met Pro Pro Ala Leu Pro Ala Thr Val Pro Pro Pro Gly Met
 545 550 555 560
 Pro Pro Pro Val Met Pro Pro Ser Leu Pro Thr Ser Val Pro Pro Pro
 565 570 575
 Gly Met Pro Pro Ser Leu Ser Ser Ala Gly Pro Pro Pro Val Leu Pro
 580 585 590
 Pro Pro Ser Leu Ser Ser Ala Gly Pro Pro Pro Val Leu Pro Pro Pro
 595 600 605
 Ser Leu Ser Ser Thr Ala Pro Pro Pro Val Met Pro Leu Pro Pro Leu
 610 615 620
 Ser Ser Ala Thr Pro Pro Pro Gly Ile Pro Pro Pro Gly Val Pro Gln
 625 630 635 640
 Gly Ile Pro Pro Gln Leu Thr Ala Ala Pro Val Pro Pro Ala Ser Ser
 645 650 655
 Ser Gln Ser Ser Gln Val Pro Glu Lys Pro Arg Pro Ala Leu Leu Pro
 660 665 670
 Thr Pro Val Ser Phe Gly Ser Ala Pro Pro Thr Thr Tyr His Pro Pro
 675 680 685
 Leu Gln Ser Ala Gly Pro Ser Glu Gln Val Asn Ser Lys Ala Pro Leu
 690 695 700
 Ser Lys Ser Ala Leu Pro Tyr Ser Ser Phe Ser Ser Asp Gln Gly Leu
 705 710 715 720
 Gly Glu Ser Ser Ala Pro Ser Gln Pro Ile Thr Ala Val Lys Asp
 725 730 735
 Met Pro Val Arg Ser Gly Gly Leu Leu Pro Asp Pro Pro Arg Ser Ser
 740 745 750
 Tyr Leu Glu Ser Pro Arg Gly Pro Arg Phe Asp Gly Pro Arg Arg Phe
 755 760 765
 Glu Asp Leu Gly Ser Arg Cys Glu Gly Pro Arg Pro Lys Gly Pro Arg
 770 775 780
 Phe Glu Gly Asn Arg Pro Asp Gly Pro Arg Pro Arg Tyr Glu Gly His

785 Pro Ala Glu Gly Thr Lys Ser Lys Trp Gly Met Ile Pro Arg Gly Pro 800
 Ala Ser Gln Phe Tyr Ile Thr Pro Ser Thr Ser Leu Ser Pro Arg Gln 815
 Ser Gly Pro Gln Trp Lys Gly Pro Lys Pro Ala Phe Gly Gln Gln His 830
 Gln Gln Gln Pro Lys Ser Gln Ala Glu Pro Leu Ser Gly Asn Lys Glu 845
 Pro Leu Ala Asp Thr Ser Ser Asn Gln Gln Lys Asn Phe Lys Met Gln 860
 Ser Ala Ala Phe Ser Ile Ala Ala Asp Val Lys Asp Val Lys Ala Ala 880
 Gln Ser Asn Glu Asn Leu Ser Asp Ser Gln Gln Glu Pro Pro Lys Ser 895
 Glu Val Ser Glu Gly Pro Val Glu Pro Ser Asn Trp Asp Gln Asn Val 910
 Gln Ser Met Glu Thr Gln Ile Asp Lys Ala Gln Ala Val Thr Gln Pro 925
 Val Pro Leu Ala Asn Lys Pro Val Pro Ala Gln Ser Thr Phe Pro Ser 940
 Lys Thr Gly Gly Met Glu Gly Gly Thr Ala Val Ala Thr Ser Ser Leu 960
 Thr Ala Asp Asn Asp Phe Lys Pro Val Gly Ile Gly Leu Pro His Ser 975
 Glu Asn Asn Gln Asp Lys Gly Leu Pro Arg Pro Asp Asn Arg Asp Asn 990
 Arg Leu Glu Gly Asn Arg Gly Asn Ser Ser Ser Tyr Arg Gly Pro 1005
 Gly Gln Ser Arg Met Glu Asp Thr Arg Asp Lys Gly Leu Val Asn 1020
 Arg Gly Arg Gly Gln Ala Ile Ser Arg Gly Pro Gly Leu Val Lys 1035
 Gln Glu Asp Phe Arg Asp Lys Met Met Gly Arg Arg Glu Asp Ser 1050
 Arg Glu Lys Met Asn Arg Gly Glu Gly Ser Arg Asp Arg Gly Leu 1065
 Val Arg Pro Gly Ser Ser Arg Glu Lys Val Pro Gly Gly Leu Gln 1080
 Gly Ser Gln Asp Arg Gly Ala Ala Gly Ser Arg Glu Arg Gly Pro 1095
 Pro Arg Arg Ala Gly Ser Gln Glu Arg Gly Pro Leu Arg Arg Ala 1110
 Gly Ser Arg Glu Arg Ile Pro Pro Arg Arg Ala Gly Ser Arg Glu 1125
 Arg Gly Pro Pro Arg Gly Pro Gly Ser Arg Glu Arg Gly Leu Gly 1140
 Arg Ser Asp Phe Gly Arg Asp Arg Gly Pro Phe Arg Pro Glu Pro 1155
 Gly Asp Gly Gly Glu Lys Met Tyr Pro Tyr His Arg Asp Glu Pro 1170
 Pro Arg Ala Pro Trp Asn His Gly Glu Glu Arg Gly His Glu Glu 1185
 Phe Pro Leu Asp Gly Arg Asn Ala Pro Met Glu Arg Glu Arg Leu 1200
 Asp Asp Trp Asp Arg Glu Arg Tyr Trp Arg Glu Cys Glu Arg Asp 1215
 Tyr Gln Asp Asp Thr Leu Glu Leu Tyr Asn Arg Glu Asp Arg Phe 1230
 Ser Ala Pro Pro Ser Arg Ser His Asp Gly Asp Arg Arg Gly Pro 1245
 Trp Trp Asp Asp Trp Glu Arg Asp Gln Asp Met Asp Glu Asp Tyr 1260
 Asn Arg Glu Met Glu Arg Asp Met Asp Arg Asp Val Asp Arg Ile 1275
 Ser Arg Pro Met Asp Met Tyr Asp Arg Ser Leu Asp Asn Glu Trp 1290
 Asp Arg Asp Tyr Gly Arg Pro Leu Asp Glu Gln Glu Ser Gln Phe 1305
 1310 1315 1320

Arg Glu	Arg Asp	Ile Pro	Ser	Leu Pro	Pro Leu	Pro	Pro Leu	Pro
1325			1330			1335		
Pro Leu	Pro Pro	Leu Asp	Arg	Tyr Arg	Asp Asp	Arg	Trp Arg	Glu
1340			1345			1350		
Glu Arg	Asn Arg	Glu His	Gly	Tyr Asp	Arg Asp	Phe	Arg Asp	Arg
1355			1360			1365		
Gly Glu	Leu Arg	Ile Arg	Glu	Tyr Pro	Glu Arg	Gly	Asp Thr	Trp
1370			1375			1380		
Arg Glu	Lys Arg	Asp Tyr	Val	Pro Asp	Arg Met	Asp	Trp Glu	Arg
1385			1390			1395		
Glu Arg	Leu Ser	Asp Arg	Trp	Tyr Pro	Ser Asp	Val	Asp Arg	His
1400			1405			1410		
Ser Pro	Met Ala	Glu His	Met	Pro Ser	Ser His	His	Ser Ser	Glu
1415			1420			1425		
Met Met	Gly Ser	Asp Ala	Ser	Leu Asp	Ser Asp	Gln	Gly Leu	Gly
1430			1435			1440		
Gly Val	Met Val	Leu Ser	Gln	Arg Gln	His Glu	Ile	Ile Leu	Lys
1445			1450			1455		
Ala Ala	Gln Glu	Leu Lys	Met	Leu Arg	Glu Gln	Lys	Glu Gln	Leu
1460			1465			1470		
Gln Lys	Met Lys	Asp Phe	Gly	Ser Glu	Pro Gln	Met	Ala Asp	His
1475			1480			1485		
Leu Pro	Pro Gln	Glu Ser	Arg	Leu Gln	Asn Thr	Ser	Ser Arg	Pro
1490			1495			1500		
Gly Met	Tyr Pro	Pro Pro	Gly	Ser Tyr	Arg Pro	Pro	Pro Pro	Met
1505			1510			1515		
Gly Lys	Pro Pro	Gly Ser	Ile	Val Arg	Pro Ser	Ala	Pro Pro	Ala
1520			1525			1530		
Arg Ser	Ser Val	Pro Val	Thr	Arg Pro	Pro Val	Pro	Ile Pro	Pro
1535			1540			1545		
Pro Pro	Pro Pro	Pro Pro	Leu	Pro Pro	Pro Pro	Pro	Val Ile	Lys
1550			1555			1560		
Pro Gln	Thr Ser	Ala Val	Glu	Gln Glu	Arg Trp	Asp	Glu Asp	Ser
1565			1570			1575		
Phe Tyr	Gly Leu	Trp Asp	Thr	Asn Asp	Glu Gln	Gly	Leu Asn	Ser
1580			1585			1590		
Glu Phe	Lys Ser	Glu Thr	Ala	Ala Ile	Pro Ser	Ala	Pro Val	Leu
1595			1600			1605		
Pro Pro	Pro Pro	Val His	Ser	Ser Ile	Pro Pro	Pro	Gly Pro	Val
1610			1615			1620		
Pro Met	Gly Met	Pro Pro	Met	Ser Lys	Pro Pro	Pro	Val Gln	Gln
1625			1630			1635		
Thr Val	Asp Tyr	Gly His	Gly	Arg Asp	Ile Ser	Thr	Asn Lys	Val
1640			1645			1650		
Glu Gln	Ile Pro	Tyr Gly	Glu	Arg Ile	Thr Leu	Arg	Pro Asp	Pro
1655			1660			1665		
Leu Pro	Glu Arg	Ser Thr	Phe	Glu Thr	Glu His	Ala	Gly Gln	Arg
1670			1675			1680		
Asp Arg	Tyr Asp	Arg Glu	Arg	Asp Arg	Glu Pro	Tyr	Phe Asp	Arg
1685			1690			1695		
Gln Ser	Asn Val	Ile Ala	Asp	His Arg	Asp Phe	Lys	Arg Asp	Arg
1700			1705			1710		
Glu Thr	His Arg	Asp Arg	Asp	Arg Asp	Arg Gly	Val	Ile Asp	Tyr
1715			1720			1725		
Asp Arg	Asp Arg	Phe Asp	Arg	Glu Arg	Arg Pro	Arg	Asp Asp	Arg
1730			1735			1740		
Ala Gln	Ser Tyr	Arg Asp	Lys	Lys Asp	His Ser	Ser	Ser Arg	Arg
1745			1750			1755		
Gly Gly	Phe Asp	Arg Pro	Ser	Tyr Asp	Arg Lys	Ser	Asp Arg	Pro
1760			1765			1770		
Val Tyr	Glu Gly	Pro Ser	Met	Phe Gly	Gly Glu	Arg	Arg Thr	Tyr
1775			1780			1785		
Pro Glu	Glu Arg	Met Pro	Leu	Pro Ala	Pro Ser	Leu	Ser His	Gln
1790			1795			1800		
Pro Pro	Pro Ala	Pro Arg	Val	Glu Lys	Lys Pro	Glu	Ser Lys	Asn
1805			1810			1815		
Val Asp	Asp Ile	Leu Lys	Pro	Pro Gly	Arg Glu	Ser	Arg Pro	Glu
1820			1825			1830		
Arg Ile	Val Val	Ile Met	Arg	Gly Leu	Pro Gly	Ser	Gly Lys	Thr

1835	1840	1845
His Val Ala Lys Leu Ile	Arg Asp Lys Glu Val	Glu Phe Gly Gly
1850	1855	1860
Pro Ala Pro Arg Val Leu	Ser Leu Asp Asp Tyr	Phe Ile Thr Glu
1865	1870	1875
Val Glu Lys Glu Glu Lys	Asp Pro Asp Ser Gly	Lys Lys Val Lys
1880	1885	1890
Lys Lys Val Met Glu Tyr	Glu Tyr Glu Ala Glu	Met Glu Glu Thr
1895	1900	1905
Tyr Arg Thr Ser Met Phe	Lys Thr Phe Lys Lys	Thr Leu Asp Asp
1910	1915	1920
Gly Phe Phe Pro Phe Ile	Ile Leu Asp Ala Ile	Asn Asp Arg Val
1925	1930	1935
Arg His Phe Asp Gln Phe	Trp Ser Ala Ala Lys	Thr Lys Gly Phe
1940	1945	1950
Glu Val Tyr Leu Ala Glu	Met Ser Ala Asp Asn	Gln Thr Cys Gly
1955	1960	1965
Lys Arg Asn Ile His Gly	Arg Lys Leu Lys Glu	Ile Asn Lys Met
1970	1975	1980
Ala Asp His Trp Glu Thr	Ala Pro Arg His Met	Met Arg Leu Asp
1985	1990	1995
Ile Arg Ser Leu Leu Gln	Asp Ala Ala Ile Glu	Glu Val Glu Met
2000	2005	2010
Glu Asp Phe Asp Ala Asn	Ile Glu Glu Gln Lys	Glu Glu Lys Lys
2015	2020	2025
Asp Ala Glu Glu Glu Glu	Ser Glu Leu Gly Tyr	Ile Pro Lys Ser
2030	2035	2040
Lys Trp Glu Met Asp Thr	Ser Glu Ala Lys Leu	Asp Lys Leu Asp
2045	2050	2055
Gly Leu Arg Thr Gly Thr	Lys Arg Lys Arg Asp	Trp Glu Ala Ile
2060	2065	2070
Ala Ser Arg Met Glu Asp	Tyr Leu Gln Leu Pro	Asp Asp Tyr Asp
2075	2080	2085
Thr Arg Ala Ser Glu Ala	Lys Ala Ser Arg Ser	Phe Phe Val Cys
2090	2095	2100
His Leu Ala Ser Thr Phe	Gln Phe Leu Phe Cys	Phe Tyr Cys Phe
2105	2110	2115
Ser Phe Phe Asp Ala Glu	Glu Glu Ser Glu Leu	Val Gly Asp
2120	2125	2130
Arg Pro Thr Thr Leu Asn	Ser Val Ser Leu Leu	Lys Phe Leu Lys
2135	2140	2145
Lys Val		
2150		

<210> 281

<211> 979

<212> PRT

<213> Homo sapiens

<400> 281

Met Ser Val Leu Gly Glu Tyr Glu Arg His Cys Asp Ser Ile Asn Ser	1	5	10	15
Asp Phe Gly Ser Glu Ser Gly Gly Cys Gly Asp Ser Ser Pro Gly Pro	20	25	30	
Ser Ala Ser Gln Gly Pro Arg Ala Gly Gly Gly Ala Ala Glu Gln Glu	35	40	45	
Glu Leu His Tyr Ile Pro Ile Arg Val Leu Gly Arg Gly Ala Phe Gly	50	55	60	
Glu Ala Thr Leu Tyr Arg Arg Thr Glu Asp Asp Ser Leu Val Val Trp	65	70	75	80
Lys Glu Val Asp Leu Thr Arg Leu Ser Glu Lys Glu Arg Arg Asp Ala	85	90	95	
Leu Asn Glu Ile Val Ile Leu Ala Leu Leu Gln His Asp Asn Ile Ile	100	105	110	
Ala Tyr Tyr Asn His Phe Met Asp Asn Thr Thr Leu Leu Ile Glu Leu	115	120	125	
Glu Tyr Cys Asn Gly Gly Asn Leu Tyr Asp Lys Ile Leu Arg Gln Lys	130	135	140	
Asp Lys Leu Phe Glu Glu Glu Met Val Val Trp Tyr Leu Phe Gln Ile	145	150	155	160

Val Ser Ala Val Ser Cys Ile His Lys Ala Gly Ile Leu His Arg Asp
 165 170 175
 Ile Lys Thr Leu Asn Ile Phe Leu Thr Lys Ala Asn Leu Ile Lys Leu
 180 185 190
 Gly Asp Tyr Gly Leu Ala Lys Lys Leu Asn Ser Glu Tyr Ser Met Ala
 195 200 205
 Glu Thr Leu Val Gly Thr Pro Tyr Tyr Met Ser Pro Glu Leu Cys Gln
 210 215 220
 Gly Val Lys Tyr Asn Phe Lys Ser Asp Ile Trp Ala Val Gly Cys Val
 225 230 235 240
 Ile Phe Glu Leu Leu Thr Leu Lys Arg Thr Phe Asp Ala Thr Asn Pro
 245 250 255
 Leu Asn Leu Cys Val Lys Ile Val Gln Gly Ile Arg Ala Met Glu Val
 260 265 270
 Asp Ser Ser Gln Tyr Ser Leu Glu Leu Ile Gln Met Val His Ser Cys
 275 280 285
 Leu Asp Gln Asp Pro Glu Gln Arg Pro Thr Ala Asp Glu Leu Leu Asp
 290 295 300
 Arg Pro Leu Leu Arg Lys Arg Arg Arg Glu Met Glu Glu Lys Val Thr
 305 310 315 320
 Leu Leu Asn Ala Pro Thr Lys Arg Pro Arg Ser Ser Thr Val Thr Glu
 325 330 335
 Ala Pro Ile Ala Val Val Thr Ser Arg Thr Ser Glu Val Tyr Ile Trp
 340 345 350
 Gly Gly Gly Lys Ser Thr Pro Gln Lys Leu Asp Val Ile Lys Ser Gly
 355 360 365
 Cys Ser Ala Arg Gln Val Cys Ala Gly Asn Thr His Phe Ala Val Val
 370 375 380
 Thr Val Glu Lys Glu Leu Tyr Thr Trp Val Asn Met Gln Gly Gly Thr
 385 390 395 400
 Lys Leu His Gly Gln Leu Gly His Gly Asp Lys Ala Ser Tyr Arg Gln
 405 410 415
 Pro Lys His Val Glu Lys Leu Gln Gly Lys Ala Ile His Gln Val Ser
 420 425 430
 Cys Gly Asp Asp Phe Thr Val Cys Val Thr Asp Glu Gly Gln Leu Tyr
 435 440 445
 Ala Phe Gly Ser Asp Tyr Tyr Gly Cys Met Gly Val Asp Lys Val Ala
 450 455 460
 Gly Pro Glu Val Leu Glu Pro Met Gln Leu Asn Phe Phe Leu Ser Asn
 465 470 475 480
 Pro Val Glu Gln Val Ser Cys Gly Asp Asn His Val Val Val Leu Thr
 485 490 495
 Arg Asn Lys Glu Val Tyr Ser Trp Gly Cys Gly Glu Tyr Gly Arg Leu
 500 505 510
 Gly Leu Asp Ser Glu Glu Asp Tyr Thr Pro Gln Lys Val Asp Val
 515 520 525
 Pro Lys Ala Leu Ile Ile Val Ala Val Gln Cys Gly Cys Asp Gly Thr
 530 535 540
 Phe Leu Leu Thr Gln Ser Gly Lys Val Leu Ala Cys Gly Leu Asn Glu
 545 550 555 560
 Phe Asn Lys Leu Gly Leu Asn Gln Cys Met Ser Gly Ile Ile Asn His
 565 570 575
 Glu Ala Tyr His Glu Val Pro Tyr Thr Thr Ser Phe Thr Leu Ala Lys
 580 585 590
 Gln Leu Ser Phe Tyr Lys Ile Arg Thr Ile Ala Pro Gly Lys Thr His
 595 600 605
 Thr Ala Ala Ile Asp Glu Arg Gly Arg Leu Leu Thr Phe Gly Cys Asn
 610 615 620
 Lys Cys Gly Gln Leu Gly Val Gly Asn Tyr Lys Lys Arg Leu Gly Ile
 625 630 635 640
 Asn Leu Leu Gly Gly Pro Leu Gly Gly Lys Gln Val Ile Arg Val Ser
 645 650 655
 Cys Gly Asp Glu Phe Thr Ile Ala Ala Thr Asp Asp Asn His Ile Phe
 660 665 670
 Ala Trp Gly Asn Gly Gly Asn Gly Arg Leu Ala Met Thr Pro Thr Glu
 675 680 685
 Arg Pro His Gly Ser Asp Ile Cys Thr Ser Trp Pro Arg Pro Ile Phe
 690 695 700
 Gly Ser Leu His His Val Pro Asp Leu Ser Cys Arg Gly Trp His Thr

705
 Ile Leu Ile Val Glu Lys Val Leu Asn Ser Lys Thr Ile Arg Ser Asn
 720
 Ser Ser Gly Leu Ser Ile Gly Thr Val Phe Gln Ser Ser Ser Pro Gly
 735
 Gly Gly Gly Gly Gly Gly Gly Glu Glu Glu Asp Ser Gln Gln Glu
 750
 Ser Glu Thr Pro Asp Pro Ser Gly Gly Phe Arg Gly Thr Met Glu Ala
 765
 Asp Arg Gly Met Glu Gly Leu Ile Ser Pro Thr Glu Ala Met Gly Asn
 780
 785 Ser Asn Gly Ala Ser Ser Ser Cys Pro Gly Trp Leu Arg Lys Glu Leu
 800
 Glu Asn Ala Glu Phe Ile Pro Met Pro Asp Ser Pro Ser Pro Leu Ser
 815
 Ala Ala Phe Ser Glu Ser Glu Lys Asp Thr Leu Pro Tyr Glu Glu Leu
 830
 Gln Gly Leu Lys Val Ala Ser Glu Ala Pro Leu Glu His Lys Pro Gln
 845
 Val Glu Ala Ser Ser Pro Arg Leu Asn Pro Ala Val Thr Cys Ala Gly
 860
 865 Lys Gly Thr Pro Leu Thr Pro Pro Ala Cys Ala Cys Ser Ser Leu Gln
 880
 Val Glu Val Glu Arg Leu Gln Gly Leu Val Leu Lys Cys Leu Ala Glu
 895
 Gln Gln Lys Leu Gln Gln Glu Asn Leu Gln Ile Phe Thr Gln Leu Gln
 910
 Lys Leu Asn Lys Lys Leu Glu Gly Gly Gln Gln Val Gly Met His Ser
 925
 Lys Gly Thr Gln Thr Ala Lys Glu Glu Met Glu Met Asp Pro Lys Pro
 940
 945 Asp Leu Asp Ser Asp Ser Gly Cys Leu Leu Gly Thr Asp Ser Cys Arg
 960
 Pro Ser Leu 965 970 975

<210> 282
 <211> 107
 <212> PRT
 <213> Homo sapiens
 <400> 282

Met Arg Phe Phe Leu Phe Phe Phe Phe Phe Leu Arg Trp Ser Leu Val
 1 5 10 15
 Ser Pro Arg Leu Glu Cys Ser Gly Leu Val Leu Ala His Cys Asn Leu
 20 25 30
 His Leu Leu Gly Ser Arg Glu Ser Pro Ala Ser Ala Ser Arg Val Ala
 35 40 45
 Gly Ile Thr Gly Val Ser His His Thr Gln Thr His Leu Met Ser Phe
 50 55 60
 Asp Val Lys Ala Cys Asn Ser Asn Pro Tyr Val Trp Asn Ile Cys Ile
 65 70 75 80
 Thr Ser Glu Phe Phe His Leu Val Asn Ser Cys Thr Ser Leu Ser Cys
 85 90 95
 Pro Phe Phe Pro Pro Leu Ala Val Ser Tyr Cys
 100 105

<210> 283
 <211> 533
 <212> PRT
 <213> Homo sapiens
 <400> 283

Met Thr Lys Lys Arg Ile Ala Val Ile Gly Gly Gly Val Ser Gly Leu
 1 5 10 15
 Ser Ser Ile Lys Cys Cys Val Glu Glu Gly Leu Glu Pro Val Cys Phe
 20 25 30
 Glu Arg Thr Asp Asp Ile Gly Gly Leu Trp Arg Phe Gln Glu Asn Pro
 35 40 45
 Glu Glu Gly Arg Ala Ser Ile Tyr Lys Ser Val Ile Ile Asn Thr Ser
 50 55 60

Lys Glu Met Met Cys Phe Ser Asp Tyr Pro Ile Pro Asp His Tyr Pro
 65 70 75 80
 Asn Phe Met His Asn Ala Gln Val Leu Glu Tyr Phe Arg Met Tyr Ala
 85 90 95
 Lys Glu Phe Asp Leu Leu Lys Tyr Ile Arg Phe Lys Thr Thr Val Cys
 100 105 110
 Ser Val Lys Lys Gln Pro Asp Phe Ala Thr Ser Gly Gln Trp Glu Val
 115 120 125
 Val Thr Glu Ser Glu Gly Lys Lys Glu Met Asn Val Phe Asp Gly Val
 130 135 140
 Met Val Cys Thr Gly His His Thr Asn Ala His Leu Pro Leu Glu Ser
 145 150 155 160
 Phe Pro Gly Ile Glu Lys Phe Lys Gly Gln Tyr Phe His Ser Arg Asp
 165 170 175
 Tyr Lys Asn Pro Glu Gly Phe Thr Gly Lys Arg Val Ile Ile Ile Gly
 180 185 190
 Ile Gly Asn Ser Gly Gly Asp Leu Ala Val Glu Ile Ser Gln Thr Ala
 195 200 205
 Lys Gln Val Phe Leu Ser Thr Arg Arg Gly Ala Trp Ile Leu Asn Arg
 210 215 220
 Val Gly Asp Tyr Gly Tyr Pro Ala Asp Val Leu Phe Ser Ser Arg Leu
 225 230 235 240
 Thr His Phe Ile Trp Lys Ile Cys Gly Gln Ser Leu Ala Asn Lys Tyr
 245 250 255
 Leu Glu Lys Lys Ile Asn Gln Arg Phe Asp His Glu Met Phe Gly Leu
 260 265 270
 Lys Pro Lys His Arg Ala Leu Ser Gly Leu Val Lys Val Lys Gly Asn Val
 275 280 285
 Leu Pro Asn Arg Ile Ile Ser Gly Leu Val Lys Val Lys Gly Asn Val
 290 295 300
 Lys Glu Phe Thr Glu Thr Ala Ala Ile Phe Glu Asp Gly Ser Arg Glu
 305 310 315 320
 Asp Asp Ile Asp Ala Val Ile Phe Ala Thr Gly Tyr Ser Phe Asp Phe
 325 330 335
 Pro Phe Leu Glu Asp Ser Val Lys Val Val Lys Asn Lys Ile Pro Leu
 340 345 350
 Tyr Lys Lys Val Phe Pro Pro Asn Leu Glu Arg Pro Thr Leu Ala Ile
 355 360 365
 Ile Gly Leu Ile Gln Pro Leu Gly Ala Ile Met Pro Ile Ser Glu Leu
 370 375 380
 Gln Gly Arg Trp Ala Thr Gln Val Phe Lys Gly Leu Lys Thr Leu Pro
 385 390 395 400
 Ser Gln Ser Glu Met Met Ala Glu Ile Ser Lys Ala Gln Glu Glu Ile
 405 410 415
 Asp Lys Arg Tyr Val Glu Ser Gln Arg His Thr Ile Gln Gly Asp Tyr
 420 425 430
 Ile Asp Thr Met Glu Glu Leu Ala Asp Leu Val Gly Val Arg Pro Asn
 435 440 445
 Leu Leu Ser Leu Ala Phe Thr Asp Pro Lys Leu Ala Leu His Leu Leu
 450 455 460
 Leu Gly Pro Cys Thr Pro Ile His Tyr Arg Val Gln Gly Pro Gly Lys
 465 470 475 480
 Trp Asp Gly Ala Arg Lys Ala Ile Leu Thr Thr Asp Asp Arg Ile Arg
 485 490 495
 Lys Pro Leu Met Thr Arg Val Val Glu Arg Ser Ser Ser Met Thr Ser
 500 505 510
 Thr Met Thr Ile Gly Lys Phe Met Leu Ala Leu Ala Phe Phe Ala Ile
 515 520 525
 Ile Ile Ala Tyr Phe
 530

<210> 284

<211> 757

<212> PRT

<213> Homo sapiens

<400> 284

Met Val Pro Asp Thr Ala Cys Val Leu Leu Leu Thr Leu Ala Ala Leu
 1 5 10 15
 Gly Ala Ser Gly Gln Gly Gln Ser Pro Leu Gly Ser Asp Leu Gly Pro

[illegible]

Phe Asn Gly Val Asp Phe Glu Gly Thr Phe His Val Asn Thr Val Thr
 580 585 590
 Asp Asp Asp Tyr Ala Gly Phe Ile Phe Gly Tyr Gln Asp Ser Ser Ser
 595 600 605
 Phe Tyr Val Val Met Trp Lys Gln Met Glu Gln Thr Tyr Trp Gln Ala
 610 615 620
 Asn Pro Phe Arg Ala Val Ala Glu Pro Gly Ile Gln Leu Lys Ala Val
 625 630 635 640
 Lys Ser Ser Thr Gly Pro Gly Glu Gln Leu Arg Asn Ala Leu Trp His
 645 650 655
 Thr Gly Asp Thr Glu Ser Gln Val Arg Leu Leu Trp Lys Asp Pro Arg
 660 665 670
 Asn Val Gly Trp Lys Asp Lys Lys Ser Tyr Arg Trp Phe Leu Gln His
 675 680 685
 Arg Pro Gln Val Gly Tyr Ile Arg Val Arg Phe Tyr Glu Gly Pro Glu
 690 695 700
 Leu Val Ala Asp Ser Asn Val Val Leu Asp Thr Met Arg Gly Gly
 705 710 715 720
 Arg Leu Gly Val Phe Cys Phe Ser Gln Glu Asn Ile Ile Trp Ala Asn
 725 730 735
 Leu Arg Tyr Arg Cys Asn Asp Thr Ile Pro Glu Asp Tyr Glu Thr His
 740 745 750
 Gln Leu Arg Gln Ala
 755

<210> 285
 <211> 3396
 <212> PRT
 <213> Homo sapiens
 <400> 285

Met Phe Ile Asn Ile Lys Ser Ile Leu Trp Met Cys Ser Thr Leu Ile
 1 5 10 15
 Val Thr His Ala Leu His Lys Val Lys Val Gly Lys Ser Pro Pro Val
 20 25 30
 Arg Gly Ser Leu Ser Gly Lys Val Ser Leu Pro Cys His Phe Ser Thr
 35 40 45
 Met Pro Thr Leu Pro Pro Ser Tyr Asn Thr Ser Glu Phe Leu Arg Ile
 50 55 60
 Lys Trp Ser Lys Ile Glu Val Asp Lys Asn Gly Lys Asp Leu Lys Glu
 65 70 75 80
 Thr Thr Val Leu Val Ala Gln Asn Gly Asn Ile Lys Ile Gly Gln Asp
 85 90 95
 Tyr Lys Gly Arg Val Ser Val Pro Thr His Pro Glu Ala Val Gly Asp
 100 105 110
 Ala Ser Leu Thr Val Val Lys Leu Ala Ser Asp Ala Gly Leu Tyr
 115 120 125
 Arg Cys Asp Val Met Tyr Gly Ile Glu Asp Thr Gln Asp Thr Val Ser
 130 135 140
 Leu Thr Val Asp Gly Val Val Phe His Tyr Arg Ala Ala Thr Ser Arg
 145 150 155 160
 Tyr Thr Leu Asn Phe Glu Ala Ala Gln Lys Ala Cys Leu Asp Val Gly
 165 170 175
 Ala Val Ile Ala Thr Pro Glu Gln Leu Phe Ala Ala Tyr Glu Asp Gly
 180 185 190
 Phe Glu Gln Cys Asp Ala Gly Trp Leu Ala Asp Gln Thr Val Arg Tyr
 195 200 205
 Pro Ile Arg Ala Pro Arg Val Gly Cys Tyr Gly Asp Lys Met Gly Lys
 210 215 220
 Ala Gly Val Arg Thr Tyr Gly Phe Arg Ser Pro Gln Glu Thr Tyr Asp
 225 230 235 240
 Val Tyr Cys Tyr Val Asp His Leu Asp Gly Asp Val Phe His Leu Thr
 245 250 255
 Val Pro Ser Lys Phe Thr Phe Glu Glu Ala Ala Lys Glu Cys Glu Asn
 260 265 270
 Gln Asp Ala Arg Leu Ala Thr Val Gly Glu Leu Gln Ala Ala Trp Arg
 275 280 285
 Asn Gly Phe Asp Gln Cys Asp Tyr Gly Trp Leu Ser Asp Ala Ser Val
 290 295 300
 Arg His Pro Val Thr Val Ala Arg Ala Gln Cys Gly Gly Gly Leu Leu

305 Gly Val Arg Thr Leu 310 Tyr Arg Phe Glu Asn 315 Gln Thr Gly Phe Pro 320 Pro
 325 Phe Asp Ala Tyr Cys Phe Lys Pro Lys Glu Ala Thr 335
 340 Thr Ile Asp Leu Ser Ile Leu Ala Glu Thr Ala Ser Pro Ser Leu Ser 350
 355 Lys Glu Pro Gln Met Val Ser Asp Arg Thr Thr Pro Ile Ile Pro Leu 365
 370 Val Asp Glu Leu Pro Val Ile Pro Thr Glu Phe Pro Pro Val Gly Asn 380
 385 Ile Val Ser Phe Glu Gln Lys Ala Thr Val Gln Pro Gln Ala Ile Thr 395
 405 Asp Ser Leu Ala Thr Lys Leu Pro Thr Pro Thr Gly Ser Thr Lys Lys 415
 420 Pro Trp Asp Met Asp Asp Tyr Ser Pro Ser Ala Ser Gly Pro Leu Gly 430
 435 Lys Leu Asp Ile Ser Glu Ile Lys Glu Glu Val Leu Gln Ser Thr Thr 445
 450 Gly Val Ser His Tyr Ala Thr Asp Ser Trp Asp Gly Val Val Glu Asp 460
 465 Lys Gln Thr Gln Glu Ser Val Thr Gln Ile Glu Gln Ile Glu Val Gly 475
 485 Pro Leu Val Thr Ser Met Glu Ile Leu Lys His Ile Pro Ser Lys Glu 495
 500 Phe Pro Val Thr Glu Thr Pro Leu Val Thr Ala Arg Met Ile Leu Glu 510
 515 Ser Lys Thr Glu Lys Lys Met Val Ser Thr Val Ser Glu Leu Val Thr 525
 530 Thr Gly His Tyr Gly Phe Thr Leu Gly Glu Glu Asp Asp Glu Asp Arg 540
 545 Thr Leu Thr Val Gly Ser Asp Glu Ser Thr Leu Ile Phe Asp Gln Ile 555
 565 Pro Glu Val Ile Thr Val Ser Lys Thr Ser Glu Asp Thr Ile His Thr 570
 580 His Leu Glu Asp Leu Glu Ser Val Ser Ala Ser Thr Thr Val Ser Pro 585
 595 Leu Ile Met Pro Asp Asn Asn Gly Ser Ser Met Asp Asp Trp Glu Glu 605
 610 Arg Gln Thr Ser Gly Arg Ile Thr Glu Glu Phe Leu Gly Lys Tyr Leu 620
 625 Ser Thr Thr Pro Phe Pro Ser Gln His Arg Thr Glu Ile Glu Leu Phe 635
 645 Pro Tyr Ser Gly Asp Lys Ile Leu Val Glu Gly Ile Ser Thr Val Ile 650
 660 Tyr Pro Ser Leu Gln Thr Glu Met Thr His Arg Arg Glu Arg Thr Glu 665
 675 Thr Leu Ile Pro Glu Met Arg Thr Asp Thr Tyr Thr Asp Glu Ile Gln 685
 690 Glu Glu Ile Thr Lys Ser Pro Phe Met Gly Lys Thr Glu Glu Glu Val 700
 705 Phe Ser Gly Met Lys Leu Ser Thr Ser Leu Ser Glu Pro Ile His Val 715
 725 Thr Glu Ser Ser Val Glu Met Thr Lys Ser Phe Asp Phe Pro Thr Leu 730
 740 Ile Thr Lys Leu Ser Ala Glu Pro Thr Glu Val Arg Asp Met Glu Glu 745
 755 Asp Phe Thr Ala Thr Pro Gly Thr Thr Lys Tyr Asp Glu Asn Ile Thr 760
 770 Thr Val Leu Leu Ala His Gly Thr Leu Ser Val Glu Ala Ala Thr Val 775
 785 Ser Lys Trp Ser Trp Asp Glu Asp Asn Thr Thr Ser Lys Pro Leu Glu 790
 805 Ser Thr Glu Pro Ser Ala Ser Ser Lys Leu Pro Pro Ala Leu Leu Thr 810
 820 Thr Val Gly Met Asn Gly Lys Asp Lys Asp Ile Pro Ser Phe Thr Glu 825
 835 Asp Gly Ala Asp Glu Phe Thr Leu Ile Pro Asp Ser Thr Gln Lys Gln 840
 850 855 860

Leu Glu Glu Val Thr Asp Glu Asp Ile Ala Ala His Gly Lys Phe Thr
 865 870 875 880
 Ile Arg Phe Gln Pro Thr Thr Ser Thr Gly Ile Ala Glu Lys Ser Thr
 885 890 895
 Leu Arg Asp Ser Thr Thr Glu Glu Lys Val Pro Pro Ile Thr Ser Thr
 900 905 910
 Glu Gly Gln Val Tyr Ala Thr Met Glu Gly Ser Ala Leu Gly Glu Val
 915 920 925
 Glu Asp Val Asp Leu Ser Lys Pro Val Ser Thr Val Pro Gln Phe Ala
 930 935 940
 His Thr Ser Glu Val Glu Gly Leu Ala Phe Val Ser Tyr Ser Ser Thr
 945 950 955 960
 Gln Glu Pro Thr Thr Tyr Val Asp Ser Ser His Thr Ile Pro Leu Ser
 965 970 975
 Val Ile Pro Lys Thr Asp Trp Gly Val Leu Val Pro Ser Val Pro Ser
 980 985 990
 Glu Asp Glu Val Leu Gly Glu Pro Ser Gln Asp Ile Leu Val Ile Asp
 995 1000 1005
 Gln Thr Arg Leu Glu Ala Thr Ile Ser Pro Glu Thr Met Arg Thr
 1010 1015 1020
 Thr Lys Ile Thr Glu Gly Thr Thr Gln Glu Glu Phe Pro Trp Lys
 1025 1030 1035
 Glu Gln Thr Ala Glu Lys Pro Val Pro Ala Leu Ser Ser Thr Ala
 1040 1045 1050
 Trp Thr Pro Lys Glu Ala Val Thr Pro Leu Asp Glu Gln Glu Gly
 1055 1060 1065
 Asp Gly Ser Ala Tyr Thr Val Ser Glu Asp Glu Leu Leu Thr Gly
 1070 1075 1080
 Ser Glu Arg Val Pro Val Leu Glu Thr Thr Pro Val Gly Lys Ile
 1085 1090 1095
 Asp His Ser Val Ser Tyr Pro Pro Gly Ala Val Thr Glu His Lys
 1100 1105 1110
 Val Lys Thr Asp Glu Val Val Thr Leu Thr Pro Arg Ile Gly Pro
 1115 1120 1125
 Lys Val Ser Leu Ser Pro Gly Pro Glu Gln Lys Tyr Glu Thr Glu
 1130 1135 1140
 Gly Ser Ser Thr Thr Gly Phe Thr Ser Ser Leu Ser Pro Phe Ser
 1145 1150 1155
 Thr His Ile Thr Gln Leu Met Glu Glu Thr Thr Thr Glu Lys Thr
 1160 1165 1170
 Ser Leu Glu Asp Ile Asp Leu Gly Ser Gly Leu Phe Glu Lys Pro
 1175 1180 1185
 Lys Ala Thr Glu Leu Ile Glu Phe Ser Thr Ile Lys Val Thr Val
 1190 1195 1200
 Pro Ser Asp Ile Thr Thr Ala Phe Ser Ser Val Asp Arg Leu His
 1205 1210 1215
 Thr Thr Ser Ala Phe Lys Pro Ser Ser Ala Ile Thr Lys Lys Pro
 1220 1225 1230
 Pro Leu Ile Asp Arg Glu Pro Gly Glu Glu Thr Thr Ser Asp Met
 1235 1240 1245
 Val Ile Ile Gly Glu Ser Thr Ser His Val Pro Pro Thr Thr Leu
 1250 1255 1260
 Glu Asp Ile Val Ala Lys Glu Thr Glu Thr Asp Ile Asp Arg Glu
 1265 1270 1275
 Tyr Phe Thr Thr Ser Ser Pro Pro Ala Thr Gln Pro Thr Arg Pro
 1280 1285 1290
 Pro Thr Val Glu Asp Lys Glu Ala Phe Gly Pro Gln Ala Leu Ser
 1295 1300 1305
 Thr Pro Gln Pro Pro Ala Ser Thr Lys Phe His Pro Asp Ile Asn
 1310 1315 1320
 Val Tyr Ile Ile Glu Val Arg Glu Asn Lys Thr Gly Arg Met Ser
 1325 1330 1335
 Asp Leu Ser Val Ile Gly His Pro Ile Asp Ser Glu Ser Lys Glu
 1340 1345 1350
 Asp Glu Pro Cys Ser Glu Glu Thr Asp Pro Val His Asp Leu Met
 1355 1360 1365
 Ala Glu Ile Leu Pro Glu Phe Pro Asp Ile Ile Glu Ile Asp Leu
 1370 1375 1380
 Tyr His Ser Glu Glu Asn Glu Glu Glu Glu Glu Cys Ala Asn

1385	Ala Thr Asp Val Thr Thr	1390	Pro Ser Val Gln	1395	Ile Asn Gly
1400	Lys His Leu Val Thr Thr	1405	Pro Lys Asp Pro	1410	Ala Ala Glu
1415	Ala Arg Arg Gly Gln Phe	1420	Ser Val Ala Pro	1425	Gln Asn Phe
1430	Ser Asp Ser Ser Glu Ser	1435	Thr His Pro Phe	1440	Ile Ala Lys
1445	Thr Glu Leu Ser Thr Ala	1450	Gln Pro Asn Glu	1455	Thr Glu Thr
1460	Thr Glu Ser Leu Glu Val	1465	Trp Lys Pro Glu	1470	Tyr Pro Glu
1475	Thr Ser Glu His Phe Ser	1480	Gly Glu Pro Asp	1485	Phe Pro Thr
1490	Val Pro Phe His Glu Glu	1495	Glu Ser Gly Thr	1500	Lys Lys Gly
1505	Ala Glu Ser Val Thr Glu	1510	Asp Thr Glu Val	1515	His Gln Ala
1520	His Glu His Thr Glu Pro	1525	Ser Leu Phe Pro	1530	Glu Ser Ser
1535	Gly Glu Ile Ala Ile Asp	1540	Glu Ser Gln Lys	1545	Ile Ala Phe Ala
1550	Arg Ala Thr Glu Val Thr	1555	Gly Glu Glu Val	1560	Lys Ser Thr
1565	Ser Val Thr Tyr Thr Pro	1570	Ile Val Pro Ser	1575	Ala Ser Ala
1580	Tyr Val Ser Glu Glu Glu	1585	Val Thr Leu Ile	1590	Asn Pro Trp
1595	Pro Asp Asp Leu Leu Ser	1600	Lys Glu Ser Trp	1605	Glu Ala Thr
1610	Pro Arg Gln Val Val Glu	1615	Ser Gly Ser Ser	1620	Ile Pro Ile
1625	Thr Glu Gly Ser Gly Glu	1630	Glu Glu Asp Glu	1635	Thr Met Phe
1640	Thr Met Val Thr Asp Leu	1645	Gln Arg Asn Thr	1650	Asp Thr Leu
1655	Ile Thr Leu Asp Thr Ser	1660	Ile Ile Thr Glu	1665	Phe Phe Glu
1670	Val Pro Ala Thr Thr Ile	1675	Pro Val Ser Glu	1680	Pro Ser Ala
1685	Lys Val Val Pro Thr Lys	1690	Val Ser Glu Thr	1695	Thr Ser Glu
1700	Trp Ile Ser Ser Thr Thr	1705	Glu Glu Lys Lys	1710	Lys Glu Glu
1715	Glu Gly Thr Thr Gly Thr	1720	Ser Thr Phe Glu	1725	Tyr Ser Ser
1730	Thr Gln Arg Ser Asp Gln	1735	Ile Leu Pro Phe	1740	Leu Glu Ser
1745	Pro Asn Val Ala Thr Ser	1750	Asp Ser Gly Thr	1755	Lys Ser Phe
1760	Met Ser Leu Thr Thr Pro	1765	Gln Ser Glu Arg	1770	Met Thr Asp
1775	Ser Thr Pro Val Phe Thr	1780	Thr Asn Thr Leu	1785	Asn Leu Gly
1790	Ala Gln Thr Thr Glu His	1795	Ser Ile His Gln	1800	Gly Val Gln
1805	Glu Gly Leu Thr Thr Leu	1810	Arg Ser Pro Ala	1815	Val Phe Met
1820	Glu Gln Gly Ser Gly Glu	1825	Ala Ala Asp Pro	1830	Thr Thr Thr
1835	Val Ser Ser Phe Ser Leu	1840	Val Glu Tyr Ala	1845	Gln Ala Glu
1850	Lys Glu Val Ala Gly Thr	1855	Ser Pro His Val	1860	Thr Thr Phe
1865	Ser Thr Glu Pro Thr Gly	1870	Val Leu Ser Thr	1875	Met Asp Arg
1880	Val Val Ala Glu Asn Ile	1885	Gln Thr Ser Arg	1890	Ile Val Ile
1895		1900		1905	

Ser	Glu	Arg	Leu	Gly	Glu	Pro	Asn	Tyr	Gly	Ala	Glu	Ile	Arg	Gly
1910						1915					1920			
Phe	Ser	Thr	Gly	Phe	Pro	Leu	Glu	Glu	Asp	Phe	Ser	Gly	Asp	Phe
1925						1930					1935			
Arg	Glu	Tyr	Ser	Thr	Val	Ser	His	Pro	Ile	Ala	Lys	Glu	Glu	Thr
1940						1945					1950			
Val	Met	Met	Glu	Gly	Ser	Gly	Asp	Ala	Ala	Phe	Arg	Asp	Thr	Gln
1955						1960					1965			
Thr	Ser	Pro	Ser	Thr	Val	Pro	Thr	Ser	Val	His	Ile	Ser	His	Ile
1970						1975					1980			
Ser	Asp	Ser	Glu	Gly	Pro	Ser	Ser	Thr	Met	Val	Ser	Thr	Ser	Ala
1985						1990					1995			
Phe	Pro	Trp	Glu	Glu	Phe	Thr	Ser	Ser	Ala	Glu	Gly	Ser	Gly	Glu
2000						2005					2010			
Gln	Leu	Val	Thr	Val	Ser	Ser	Ser	Val	Val	Pro	Val	Leu	Pro	Ser
2015						2020					2025			
Ala	Val	Gln	Lys	Phe	Ser	Gly	Thr	Ala	Ser	Ser	Ile	Ile	Asp	Glu
2030						2035					2040			
Gly	Leu	Gly	Glu	Val	Gly	Thr	Val	Asn	Glu	Ile	Asp	Arg	Arg	Ser
2045						2050					2055			
Thr	Ile	Leu	Pro	Thr	Ala	Glu	Val	Glu	Gly	Thr	Lys	Ala	Pro	Val
2060						2065					2070			
Glu	Lys	Glu	Glu	Val	Lys	Val	Ser	Gly	Thr	Val	Ser	Thr	Asn	Phe
2075						2080					2085			
Pro	Gln	Thr	Ile	Glu	Pro	Ala	Lys	Leu	Trp	Ser	Arg	Gln	Glu	Val
2090						2095					2100			
Asn	Pro	Val	Arg	Gln	Glu	Ile	Glu	Ser	Glu	Thr	Thr	Ser	Glu	Glu
2105						2110					2115			
Gln	Ile	Gln	Glu	Glu	Lys	Ser	Phe	Glu	Ser	Pro	Gln	Asn	Ser	Pro
2120						2125					2130			
Ala	Thr	Glu	Gln	Thr	Ile	Phe	Asp	Ser	Gln	Thr	Phe	Thr	Glu	Thr
2135						2140					2145			
Glu	Leu	Lys	Thr	Thr	Asp	Tyr	Ser	Val	Leu	Thr	Thr	Lys	Lys	Thr
2150						2155					2160			
Tyr	Ser	Asp	Asp	Lys	Glu	Met	Lys	Glu	Glu	Asp	Thr	Ser	Leu	Val
2165						2170					2175			
Asn	Met	Ser	Thr	Pro	Asp	Pro	Asp	Ala	Asn	Gly	Leu	Glu	Ser	Tyr
2180						2185					2190			
Thr	Thr	Leu	Pro	Glu	Ala	Thr	Glu	Lys	Ser	His	Phe	Phe	Leu	Ala
2195						2200					2205			
Thr	Ala	Leu	Val	Thr	Glu	Ser	Ile	Pro	Ala	Glu	His	Val	Val	Thr
2210						2215					2220			
Asp	Ser	Pro	Ile	Lys	Lys	Glu	Glu	Ser	Thr	Lys	His	Phe	Pro	Lys
2225						2230					2235			
Gly	Met	Arg	Pro	Thr	Ile	Gln	Glu	Ser	Asp	Thr	Glu	Leu	Leu	Phe
2240						2245					2250			
Ser	Gly	Leu	Gly	Ser	Gly	Glu	Glu	Val	Leu	Pro	Thr	Leu	Pro	Thr
2255						2260					2265			
Glu	Ser	Val	Asn	Phe	Thr	Glu	Val	Glu	Gln	Ile	Asn	Asn	Thr	Leu
2270						2275					2280			
Tyr	Pro	His	Thr	Ser	Gln	Val	Glu	Ser	Thr	Ser	Ser	Asp	Lys	Ile
2285						2290					2295			
Glu	Asp	Phe	Asn	Arg	Met	Glu	Asn	Val	Ala	Lys	Glu	Val	Gly	Pro
2300						2305					2310			
Leu	Val	Ser	Gln	Thr	Asp	Ile	Phe	Glu	Gly	Ser	Gly	Ser	Val	Thr
2315						2320					2325			
Ser	Thr	Thr	Leu	Ile	Glu	Ile	Leu	Ser	Asp	Thr	Gly	Ala	Glu	Gly
2330						2335					2340			
Pro	Thr	Val	Ala	Pro	Leu	Pro	Phe	Ser	Thr	Asp	Ile	Gly	His	Pro
2345						2350					2355			
Gln	Asn	Gln	Thr	Val	Arg	Trp	Ala	Glu	Glu	Ile	Gln	Thr	Ser	Arg
2360						2365					2370			
Pro	Gln	Thr	Ile	Thr	Glu	Gln	Asp	Ser	Asn	Lys	Asn	Ser	Ser	Thr
2375						2380					2385			
Ala	Glu	Ile	Asn	Glu	Thr	Thr	Thr	Ser	Ser	Thr	Asp	Phe	Leu	Ala
2390						2395					2400			
Arg	Ala	Tyr	Gly	Phe	Glu	Met	Ala	Lys	Glu	Phe	Val	Thr	Ser	Ala
2405						2410					2415			
Pro	Lys	Pro	Ser	Asp	Leu	Tyr	Tyr	Glu	Pro	Ser	Gly	Glu	Gly	Ser

2420	Gly Glu Val Asp Ile Val	2425	Ser Phe His Thr	2430	Ser Ala Thr Thr
2435	Gln Ala Thr Arg Gln Glu	2440	Ser Thr Thr Phe	2445	Val Ser Asp Gly
2450	Ser Leu Glu Lys His Pro	2455	Glu Val Pro Ser Ala	2460	Lys Ala Val Thr
2465	Ala Asp Gly Phe Pro Thr	2470	Val Ser Val Met Leu	2475	Pro Leu His Ser
2480	Glu Gln Asn Lys Ser Ser	2485	Pro Asp Pro Thr Ser	2490	Thr Leu Ser Asn
2495	Thr Val Ser Tyr Glu Arg	2500	Thr Asp Gly Ser	2505	Phe Gln Asp Arg
2510	Phe Arg Glu Phe Glu Asp	2515	Thr Leu Lys Pro	2520	Asn Arg Lys Lys
2525	Pro Thr Glu Asn Ile Ile	2530	Ile Asp Leu Asp Lys	2535	Glu Asp Lys Asp
2540	Leu Ile Leu Thr Ile Thr	2545	Glu Ser Thr Ile Leu	2550	Ile Leu Pro
2555	Glu Leu Thr Ser Asp Lys	2560	Asn Thr Ile Ile Asp	2565	Ile Asp His Thr
2570	Lys Pro Val Tyr Glu Asp	2575	Ile Leu Gly Met Gln	2580	Thr Asp Ile Asp
2585	Thr Glu Val Pro Ser Glu	2590	Pro His Asp Ser Asn	2595	Asp Glu Ser Asn
2600	Asp Asp Ser Thr Gln Val	2605	Gln Glu Ile Tyr Glu	2610	Ala Ala Val Asn
2615	Leu Ser Leu Thr Glu Glu	2620	Thr Phe Glu Gly Ser	2625	Ala Asp Val Leu
2630	Ala Ser Tyr Thr Gln Ala	2635	Thr His Asp Glu Ser	2640	Met Thr Tyr Glu
2645	Asp Arg Ser Gln Leu Asp	2650	His Met Gly Phe His	2655	Phe Thr Thr Gly
2660	Ile Pro Ala Pro Ser Thr	2665	Glu Thr Glu Leu Asp	2670	Val Leu Leu Pro
2675	Thr Ala Thr Ser Leu Pro	2680	Ile Pro Arg Lys Ser	2685	Ala Thr Val Ile
2690	Pro Glu Ile Glu Gly Ile	2695	Lys Ala Glu Ala Lys	2700	Ala Leu Asp Asp
2705	Met Phe Glu Ser Ser Thr	2710	Leu Ser Asp Gly Gln	2715	Ala Ile Ala Asp
2720	Gln Ser Glu Ile Ile Pro	2725	Thr Leu Gly Gln Phe	2730	Glu Arg Thr Gln
2735	Glu Glu Tyr Glu Asp Lys	2740	Lys His Ala Gly Pro	2745	Ser Phe Gln Pro
2750	Glu Phe Ser Ser Gly Ala	2755	Glu Glu Ala Leu Val	2760	Asp His Thr Pro
2765	Tyr Leu Ser Ile Ala Thr	2770	Thr His Leu Met Asp	2775	Gln Ser Val Thr
2780	Glu Val Pro Asp Val Met	2785	Glu Gly Ser Asn Pro	2790	Pro Tyr Tyr Thr
2795	Asp Thr Thr Leu Ala Val	2800	Ser Thr Phe Ala Lys	2805	Leu Ser Ser Gln
2810	Thr Pro Ser Ser Pro Leu	2815	Thr Ile Tyr Ser Gly	2820	Ser Glu Ala Ser
2825	Gly His Thr Glu Ile Pro	2830	Gln Pro Ser Ala Leu	2835	Pro Gly Ile Asp
2840	Val Gly Ser Ser Val Met	2845	Ser Pro Gln Asp Ser	2850	Phe Lys Glu Ile
2855	His Val Asn Ile Glu Ala	2860	Thr Phe Lys Pro Ser	2865	Ser Glu Glu Tyr
2870	Leu His Ile Thr Glu Pro	2875	Pro Ser Leu Ser Pro	2880	Asp Thr Lys Leu
2885	Glu Pro Ser Glu Asp Asp	2890	Gly Lys Pro Glu Leu	2895	Leu Glu Glu Met
2900	Glu Ala Ser Pro Thr Glu	2905	Leu Ile Ala Val Glu	2910	Gly Thr Glu Ile
2915	Leu Gln Asp Phe Gln Asn	2920	Lys Thr Asp Gly Gln	2925	Val Ser Gly Glu
2930		2935		2940	

Ala	Ile	Lys	Met	Phe	Pro	Thr	Ile	Lys	Thr	Pro	Glu	Ala	Gly	Thr
2945						2950					2955			
Val	Ile	Thr	Thr	Ala	Asp	Glu	Ile	Glu	Leu	Glu	Gly	Ala	Thr	Gln
2960						2965					2970			
Trp	Pro	His	Ser	Thr	Ser	Ala	Ser	Ala	Thr	Tyr	Gly	Val	Glu	Ala
2975						2980					2985			
Gly	Val	Val	Pro	Trp	Leu	Ser	Pro	Gln	Thr	Ser	Glu	Arg	Pro	Thr
2990						2995					3000			
Leu	Ser	Ser	Ser	Pro	Glu	Ile	Asn	Pro	Glu	Thr	Gln	Ala	Ala	Leu
3005						3010					3015			
Ile	Arg	Gly	Gln	Asp	Ser	Thr	Ile	Ala	Ala	Ser	Glu	Gln	Gln	Val
3020						3025					3030			
Ala	Ala	Arg	Ile	Leu	Asp	Ser	Asn	Asp	Gln	Ala	Thr	Val	Asn	Pro
3035						3040					3045			
Val	Glu	Phe	Asn	Thr	Glu	Val	Ala	Thr	Pro	Pro	Phe	Ser	Leu	Leu
3050						3055					3060			
Glu	Thr	Ser	Asn	Glu	Thr	Asp	Phe	Leu	Ile	Gly	Ile	Asn	Glu	Glu
3065						3070					3075			
Ser	Val	Glu	Gly	Thr	Ala	Ile	Tyr	Leu	Pro	Gly	Pro	Asp	Arg	Cys
3080						3085					3090			
Lys	Met	Asn	Pro	Cys	Leu	Asn	Gly	Gly	Thr	Cys	Tyr	Pro	Thr	Glu
3095						3100					3105			
Thr	Ser	Tyr	Val	Cys	Thr	Cys	Val	Pro	Gly	Tyr	Ser	Gly	Asp	Gln
3110						3115					3120			
Cys	Glu	Leu	Asp	Phe	Asp	Glu	Cys	His	Ser	Asn	Pro	Cys	Arg	Asn
3125						3130					3135			
Gly	Ala	Thr	Cys	Val	Asp	Gly	Phe	Asn	Thr	Phe	Arg	Cys	Leu	Cys
3140						3145					3150			
Leu	Pro	Ser	Tyr	Val	Gly	Ala	Leu	Cys	Glu	Gln	Asp	Thr	Glu	Thr
3155						3160					3165			
Cys	Asp	Tyr	Gly	Trp	His	Lys	Phe	Gln	Gly	Gln	Cys	Tyr	Lys	Tyr
3170						3175					3180			
Phe	Ala	His	Arg	Arg	Thr	Trp	Asp	Ala	Ala	Glu	Arg	Glu	Cys	Arg
3185						3190					3195			
Leu	Gln	Gly	Ala	His	Leu	Thr	Ser	Ile	Leu	Ser	His	Glu	Glu	Gln
3200						3205					3210			
Met	Phe	Val	Asn	Arg	Val	Gly	His	Asp	Tyr	Gln	Trp	Ile	Gly	Leu
3215						3220					3225			
Asn	Asp	Lys	Met	Phe	Glu	His	Asp	Phe	Arg	Trp	Thr	Asp	Gly	Ser
3230						3235					3240			
Thr	Leu	Gln	Tyr	Glu	Asn	Trp	Arg	Pro	Asn	Gln	Pro	Asp	Ser	Phe
3245						3250					3255			
Phe	Ser	Ala	Gly	Glu	Asp	Cys	Val	Val	Ile	Ile	Trp	His	Glu	Asn
3260						3265					3270			
Gly	Gln	Trp	Asn	Asp	Val	Pro	Cys	Asn	Tyr	His	Leu	Thr	Tyr	Thr
3275						3280					3285			
Cys	Lys	Lys	Gly	Thr	Val	Ala	Cys	Gly	Gln	Pro	Pro	Val	Val	Glu
3290						3295					3300			
Asn	Ala	Lys	Thr	Phe	Gly	Lys	Met	Lys	Pro	Arg	Tyr	Glu	Ile	Asn
3305						3310					3315			
Ser	Leu	Ile	Arg	Tyr	His	Cys	Lys	Asp	Gly	Phe	Ile	Gln	Arg	His
3320						3325					3330			
Leu	Pro	Thr	Ile	Arg	Cys	Leu	Gly	Asn	Gly	Arg	Trp	Ala	Ile	Pro
3335						3340					3345			
Lys	Ile	Thr	Cys	Met	Asn	Pro	Ser	Ala	Tyr	Gln	Arg	Thr	Tyr	Ser
3350						3355					3360			
Met	Lys	Tyr	Phe	Lys	Asn	Ser	Ser	Ser	Ala	Lys	Asp	Asn	Ser	Ile
3365						3370					3375			
Asn	Thr	Ser	Lys	His	Asp	His	Arg	Trp	Ser	Arg	Arg	Trp	Gln	Glu
3380						3385					3390			
Ser	Arg	Arg												
3395														

<210> 286

<211> 148

<212> PRT

<213> Homo sapiens

<400> 286

Met Met His Leu Leu Asn Ser Gln Gly Trp Asn Glu Pro Ala Gly Pro

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1          5          10          15
Pro Glu Ser Trp Ser Gly Val Gln Ser Ser Val Phe Leu Ser Val Tyr
20          25          30
Ser Ser Leu Thr Val Pro Arg Pro Ser Gly Val Gly Ala Gly Ser Gln
35          40          45
Cys Trp Arg Arg Asn Asn Lys Ser Gln Leu Glu Pro Leu Phe Leu Lys
50          55          60
Ser Ala Tyr Cys Ala Gln Ile Leu Phe Lys His Trp Thr Trp Ile Leu
65          70          75          80
Ser Leu Ala Leu Ser Thr Pro Ala Val Gly Val Pro Pro Leu Pro Thr
85          90          95
Cys Asp Gly Val Gln Arg His Leu Leu Phe Cys Met Val Phe Asn Arg
100          105          110
Leu Gly Val Leu Phe Ile Ser Ser Asn Phe Val Gln Glu Leu Met Ala
115          120          125
Cys Leu Gly Leu Ser Ser Leu Asn Gln Arg Lys Trp Lys Pro Phe Pro
130          135          140
Cys Cys Ser Pro
145

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<210> 287
<211> 449
<212> PRT
<213> Homo sapiens
<400> 287

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Met Leu Trp Lys Leu Val Glu Asn Val Lys Tyr Glu Asp Ile Tyr Glu
1          5          10          15
Asp Arg His Asp Gly Val Pro Ser His Ser Ser Arg Leu Ser Gln Leu
20          25          30
Gly Ser Val Ser Gln Gly Pro Tyr Ser Ser Ala Pro Pro Leu Ser His
35          40          45
Thr Pro Ser Ser Asp Phe Gln Pro Pro Tyr Phe Pro Pro Tyr Gln
50          55          60
Pro Leu Pro Tyr His Gln Ser Gln Asp Pro Tyr Ser His Val Asn Asp
65          70          75          80
Pro Tyr Ser Leu Asn Pro Leu His Gln Pro Gln Gln His Pro Trp Gly
85          90          95
Gln Arg Gln Arg Gln Glu Val Gly Ser Glu Ala Gly Ser Leu Leu Pro
100          105          110
Gln Pro Arg Ala Ala Leu Pro Gln Leu Ser Gly Leu Asp Pro Arg Arg
115          120          125
Asp Tyr His Ser Val Arg Arg Pro Asp Val Leu Leu His Ser Ala His
130          135          140
His Gly Leu Asp Ala Gly Met Gly Asp Ser Leu Ser Leu His Gly Leu
145          150          155          160
Gly His Pro Gly Met Glu Asp Val Gln Ser Val Glu Asp Ala Asn Asn
165          170          175
Ser Gly Met Asn Leu Leu Asp Gln Ser Val Ile Lys Lys Val Pro Val
180          185          190
Pro Pro Lys Ser Val Thr Ser Leu Met Met Asn Lys Asp Gly Phe Leu
195          200          205
Gly Gly Met Ser Val Asn Thr Gly Glu Val Phe Cys Ser Val Pro Gly
210          215          220
Arg Leu Ser Leu Leu Ser Ser Thr Ser Lys Tyr Lys Val Thr Val Gly
225          230          235          240
Glu Val Gln Arg Arg Leu Ser Pro Pro Glu Cys Leu Asn Ala Ser Leu
245          250          255
Leu Gly Gly Val Leu Arg Arg Ala Lys Ser Lys Asn Gly Gly Arg Ser
260          265          270
Leu Arg Glu Arg Leu Glu Lys Ile Gly Leu Asn Leu Pro Ala Gly Arg
275          280          285
Arg Lys Ala Ala Asn Val Thr Leu Leu Thr Ser Leu Val Glu Gly Glu
290          295          300
Ala Val His Leu Ala Arg Asp Phe Gly Tyr Ile Cys Glu Thr Glu Phe
305          310          315          320
Pro Ala Lys Ala Val Ser Glu Tyr Leu Asn Arg Gln His Thr Asp Pro
325          330          335
Ser Asp Leu His Ser Arg Lys Asn Met Leu Leu Ala Thr Lys Gln Leu
340          345          350

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Cys Lys Glu Phe Thr Asp Leu Leu Ala Gln Asp Arg Thr Pro Ile Gly
 355 360 365
 Asn Ser Arg Pro Ser Pro Ile Leu Glu Pro Gly Ile Gln Ser Cys Leu
 370 375 380
 Thr His Phe Ser Leu Ile Thr His Gly Phe Gly Ala Pro Ala Ile Cys
 385 390 395
 Ala Ala Leu Thr Ala Leu Gln Asn Tyr Leu Thr Glu Ala Leu Lys Gly
 405 410 415
 Met Asp Lys Met Phe Leu Asn Asn Thr Thr Thr Asn Arg His Thr Ser
 420 425 430
 Gly Glu Gly Pro Gly Ser Lys Thr Gly Asp Lys Glu Glu Lys His Arg
 435 440 445
 Lys

<210> 288
 <211> 114
 <212> PRT
 <213> Homo sapiens
 <400> 288

Met Leu Leu Ser Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
 1 5 10 15
 Pro Leu Tyr His Ser Ala Ile Met Asn Pro Cys Phe Cys Gly Phe Leu
 20 25 30
 Leu Leu Leu Ser Phe Phe Phe Phe Leu Ser Leu Leu Asp Thr Gln Leu
 35 40 45
 His Asn Leu Ile Ala Leu Gln Met Thr Cys Phe Lys Asp Val Glu Ile
 50 55 60
 Pro Asn Phe Phe Cys Asp Pro Ser Gln Leu Pro His Leu Ala Cys Cys
 65 70 75 80
 Asp Thr Phe Thr Asn Asn Ile Ile Val Tyr Phe Pro Ala Val Ile Phe
 85 90 95
 Val Phe Leu Pro Ile Ser Gly Thr Leu Phe Ser Leu Lys Leu Phe Pro
 100 105 110
 Pro Phe

<210> 289
 <211> 195
 <212> PRT
 <213> Homo sapiens
 <400> 289

Met Met Ala Ile Arg Glu Leu Lys Val Cys Leu Leu Gly Asp Thr Gly
 1 5 10 15
 Val Gly Lys Ser Ile Val Cys Arg Phe Val Gln Asp His Phe Asp
 20 25 30
 His Asn Ile Ser Pro Thr Ile Gly Ala Ser Phe Met Thr Lys Thr Val
 35 40 45
 Pro Cys Gly Asn Glu Leu His Lys Phe Leu Ile Trp Asp Thr Ala Gly
 50 55 60
 Gln Glu Arg Phe His Ser Leu Ala Pro Met Tyr Tyr Arg Gly Ser Ala
 65 70 75 80
 Ala Ala Val Ile Val Tyr Asp Ile Thr Lys Gln Asp Ser Phe Tyr Thr
 85 90 95
 Leu Lys Lys Trp Val Lys Glu Leu Lys Glu His Gly Pro Glu Asn Ile
 100 105 110
 Val Met Ala Ile Ala Gly Asn Lys Cys Asp Leu Ser Asp Ile Arg Glu
 115 120 125
 Val Pro Leu Lys Asp Ala Lys Glu Tyr Ala Glu Ser Ile Gly Ala Ile
 130 135 140
 Val Val Glu Thr Ser Ala Lys Asn Ala Ile Asn Ile Glu Glu Leu Phe
 145 150 155 160
 Gln Gly Ile Ser Arg Gln Ile Pro Pro Leu Asp Pro His Glu Asn Gly
 165 170 175
 Asn Asn Gly Thr Ile Lys Val Glu Lys Pro Thr Met Gln Ala Ser Arg
 180 185 190
 Arg Cys Cys
 195

<210> 290
 <211> 270
 <212> PRT
 <213> Homo sapiens
 <400> 290

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Met Ala Ala Ser Ser Ser Gly Glu Lys Glu Lys Glu Arg Leu Gly Gly
1      5      10      15
Gly Leu Gly Val Ala Gly Gly Asn Ser Thr Arg Glu Arg Leu Leu Ser
20     25     30
Ala Leu Glu Asp Leu Glu Val Leu Ser Arg Glu Leu Ile Glu Met Leu
35     40     45
Ala Ile Ser Arg Asn Gln Lys Leu Leu Gln Ala Gly Glu Glu Asn Gln
50     55     60
Val Leu Glu Leu Leu Ile His Arg Asp Gly Glu Phe Gln Glu Leu Met
65     70     75     80
Lys Leu Ala Leu Asn Gln Gly Lys Ile His His Glu Met Gln Val Leu
85     90     95
Glu Lys Glu Val Glu Lys Arg Asp Ser Asp Ile Gln Gln Leu Gln Lys
100    105    110
Gln Leu Lys Glu Ala Glu Gln Ile Leu Ala Thr Ala Val Tyr Gln Ala
115    120    125
Lys Glu Lys Leu Lys Ser Ile Glu Lys Ala Arg Lys Gly Ala Ile Ser
130    135    140
Ser Glu Glu Ile Ile Lys Tyr Ala His Arg Ile Ser Ala Ser Asn Ala
145    150    155    160
Val Cys Ala Pro Leu Thr Trp Val Pro Gly Asp Pro Arg Arg Pro Tyr
165    170    175
Pro Thr Asp Leu Glu Met Arg Ser Gly Leu Leu Gly Gln Met Asn Asn
180    185    190
Pro Ser Thr Asn Gly Val Asn Gly His Leu Pro Gly Asp Ala Leu Ala
195    200    205
Ala Gly Arg Leu Pro Asp Val Leu Ala Pro Gln Tyr Pro Trp Gln Ser
210    215    220
Asn Asp Met Ser Met Asn Met Leu Pro Pro Asn His Ser Ser Asp Phe
225    230    235    240
Leu Leu Glu Pro Pro Gly His Asn Lys Glu Asn Glu Asp Asp Val Glu
245    250    255
Ile Met Ser Thr Asp Ser Ser Ser Ser Ser Ser Glu Ser Asp
260    265    270

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<210> 291
 <211> 228
 <212> PRT
 <213> Homo sapiens
 <400> 291

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Met Leu Ser Arg Cys Arg Ser Gly Leu Leu His Val Leu Gly Leu Ser
1      5      10      15
Phe Leu Leu Gln Thr Arg Arg Pro Ile Leu Leu Cys Ser Pro Arg Leu
20     25     30
Met Lys Pro Leu Val Val Phe Val Leu Gly Gly Pro Gly Ala Gly Lys
35     40     45
Gly Thr Gln Cys Ala Arg Ile Val Glu Lys Tyr Gly Tyr Thr His Leu
50     55     60
Ser Ala Gly Glu Leu Leu Arg Asp Glu Arg Lys Asn Pro Asp Ser Gln
65     70     75     80
Tyr Gly Glu Leu Ile Glu Lys Tyr Ile Lys Glu Gly Lys Ile Val Pro
85     90     95
Val Glu Ile Thr Ile Ser Leu Leu Lys Arg Glu Met Asp Gln Thr Met
100    105    110
Ala Ala Asn Ala Gln Lys Asn Lys Phe Leu Ile Asp Gly Phe Pro Arg
115    120    125
Asn Gln Asp Asn Leu Gln Gly Trp Asn Lys Thr Met Asp Gly Lys Ala
130    135    140
Asp Val Ser Phe Val Leu Phe Phe Asp Cys Asn Asn Glu Ile Cys Ile
145    150    155    160
Glu Arg Cys Leu Glu Arg Gly Lys Ser Ser Gly Arg Ser Asp Asp Asn
165    170    175
Arg Glu Ser Leu Glu Lys Arg Ile Gln Thr Tyr Leu Gln Ser Thr Lys
180    185    190

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Pro Ile Ile Asp Leu Tyr Glu Glu Met Gly Lys Val Lys Lys Ile Asp
 195 200 205
 Ala Ser Lys Ser Val Asp Glu Val Phe Asp Glu Val Val Gln Ile Phe
 210 215 220
 Asp Lys Glu Gly
 225

<210> 292
 <211> 130
 <212> PRT
 <213> Homo sapiens
 <400> 292

Met Ala Phe Cys Leu Arg Ala Ser Leu Gly Pro Asp Cys Cys Cys Trp
 1 5 10 15
 Tyr Gln Ser Pro Glu Thr Leu Pro Pro Trp Ser Pro Cys Met Pro Ser
 20 25 30
 Cys Ser Tyr Cys Leu Val Ala Leu Lys Gln His Ile Ser Thr Val Pro
 35 40 45
 Gly Arg Ile Val Gly Gly Phe Thr Thr Pro Ala Phe Leu Thr Ser Ser
 50 55 60
 Ser Ala Gln His Trp Val Pro Leu Pro Ser Phe Pro Ala Gly Ala Ser
 65 70 75 80
 Trp Ala Thr Val Ser Gly Ser Gly Pro Ala Arg Val Val Leu Leu Phe
 85 90 95
 Leu Leu Leu Leu Gly Asn His Thr Trp Gln Val Lys Cys Pro Lys His
 100 105 110
 Leu Val Ser Leu Pro Lys Asn Lys Pro Phe Leu Cys Thr Ser Leu Glu
 115 120 125
 Ala Arg
 130

<210> 293
 <211> 460
 <212> PRT
 <213> Homo sapiens
 <400> 293

Met Ala Ser Leu Leu Gln Ser Asp Arg Val Leu Tyr Leu Val Gln Gly
 1 5 10 15
 Glu Lys Lys Val Arg Ala Pro Leu Ser Gln Leu Tyr Phe Cys Arg Tyr
 20 25 30
 Cys Ser Glu Leu Arg Ser Leu Glu Cys Val Ser His Glu Val Asp Ser
 35 40 45
 His Tyr Cys Pro Ser Cys Leu Glu Asn Met Pro Ser Ala Glu Ala Lys
 50 55 60
 Leu Lys Lys Asn Arg Cys Ala Asn Cys Phe Asp Cys Pro Gly Cys Met
 65 70 75 80
 His Thr Leu Ser Thr Arg Ala Thr Ser Ile Ser Thr Gln Leu Pro Asp
 85 90 95
 Asp Pro Ala Lys Thr Thr Met Lys Lys Ala Tyr Tyr Leu Ala Cys Gly
 100 105 110
 Phe Cys Arg Trp Thr Ser Arg Asp Val Gly Met Ala Asp Lys Ser Val
 115 120 125
 Ala Ser Gly Gly Trp Gln Glu Pro Glu Asn Pro His Thr Gln Arg Met
 130 135 140
 Asn Lys Leu Ile Glu Tyr Tyr Gln Gln Leu Ala Gln Lys Glu Lys Val
 145 150 155 160
 Glu Arg Asp Arg Lys Lys Leu Ala Arg Arg Asn Tyr Met Pro Leu
 165 170 175
 Ala Phe Ser Asp Lys Tyr Gly Leu Gly Thr Arg Leu Gln Arg Pro Arg
 180 185 190
 Ala Gly Ala Ser Ile Ser Thr Leu Ala Gly Leu Ser Leu Lys Glu Gly
 195 200 205
 Glu Asp Gln Lys Glu Ile Lys Ile Glu Pro Ala Gln Ala Val Asp Glu
 210 215 220
 Val Glu Pro Leu Pro Glu Asp Tyr Tyr Thr Arg Pro Val Asn Leu Thr
 225 230 235 240
 Glu Val Thr Thr Leu Gln Gln Arg Leu Leu Gln Pro Asp Phe Gln Pro
 245 250 255
 Val Cys Ala Ser Gln Leu Tyr Pro Arg His Lys His Leu Leu Ile Lys

260
 Arg Ser Leu Arg Cys Arg Lys Cys 265
 275 Glu His Asn Leu Ser Lys Pro Glu
 Phe Asn Pro Thr Ser Ile Lys 280
 290 Phe Lys Ile Gln Leu Val Ala Val Asn
 Tyr Ile Pro Glu Val Arg Ile Met Ser Ile Pro Asn Leu Arg Tyr Met
 305 310 315 320
 Lys Glu Ser Gln Val Leu Leu Thr Leu Thr Asn Pro Val Glu Asn Leu
 325 330 335
 Thr His Val Thr Leu Phe Glu Cys Glu Glu Gly Asp Pro Asp Asp Ile
 340 345 350
 Asn Ser Thr Ala Lys Val Val Val Pro Pro Lys Glu Leu Val Leu Ala
 355 360 365
 Gly Lys Asp Ala Ala Ala Glu Tyr Asp Glu Leu Ala Glu Pro Gln Asp
 370 375 380
 Phe Gln Asp Asp Pro Asp Ile Ile Ala Phe Arg Lys Ala Asn Lys Val
 385 390 395 400
 Gly Ile Phe Ile Lys Val Thr Pro Gln Arg Glu Glu Gly Glu Val Thr
 405 410 415
 Val Cys Phe Lys Met Lys His Asp Phe Lys Asn Leu Ala Ala Pro Ile
 420 425 430
 Arg Pro Ile Glu Glu Ser Asp Gln Gly Thr Glu Val Ile Trp Leu Thr
 435 440 445
 Gln His Val Glu Leu Ser Leu Gly Pro Leu Leu Pro
 450 455 460

<210> 294
 <211> 524
 <212> PRT
 <213> Homo sapiens
 <400> 294

Met Thr Ala Glu Asp Ser Thr Ala Ala Met Ser Ser Asp Ser Ala Ala
 1 5 10 15
 Gly Ser Ser Ala Lys Val Pro Glu Gly Val Ala Gly Ala Pro Asn Glu
 20 25 30
 Ala Ala Leu Leu Ala Leu Met Glu Arg Thr Gly Tyr Ser Met Val Gln
 35 40 45
 Glu Asn Gly Gln Arg Lys Tyr Gly Gly Pro Pro Pro Gly Trp Glu Gly
 50 55 60
 Pro His Pro Gln Arg Gly Cys Glu Val Phe Val Gly Lys Ile Pro Arg
 65 70 75 80
 Asp Val Tyr Glu Asp Glu Leu Val Pro Val Phe Glu Ala Val Gly Arg
 85 90 95
 Thr Tyr Glu Leu Arg Leu Met Met Asp Phe Asp Gly Lys Asn Arg Gly
 100 105 110
 Tyr Ala Phe Val Met Tyr Cys His Lys His Glu Ala Lys Arg Ala Val
 115 120 125
 Arg Glu Leu Asn Asn Tyr Glu Ile Arg Pro Gly Arg Leu Leu Gly Val
 130 135 140
 Cys Cys Ser Val Asp Asn Cys Arg Leu Phe Ile Gly Gly Ile Pro Lys
 145 150 155 160
 Met Lys Lys Arg Glu Glu Ile Leu Glu Glu Ile Ala Lys Val Thr Glu
 165 170 175
 Gly Val Leu Asp Val Ile Val Tyr Ala Ser Ala Ala Asp Lys Met Lys
 180 185 190
 Asn Arg Gly Phe Ala Phe Val Glu Tyr Glu Ser His Arg Ala Ala Ala
 195 200 205
 Met Ala Arg Arg Lys Leu Met Pro Gly Arg Ile Gln Leu Trp Gly His
 210 215 220
 Gln Ile Ala Val Asp Trp Ala Glu Pro Glu Ile Asp Val Asp Glu Asp
 225 230 235 240
 Val Met Glu Thr Val Lys Ile Leu Tyr Val Arg Asn Leu Met Ile Glu
 245 250 255
 Thr Thr Glu Asp Thr Ile Lys Lys Ser Phe Gly Gln Phe Asn Pro Gly
 260 265 270
 Cys Val Glu Arg Val Lys Lys Ile Arg Asp Tyr Ala Phe Val His Phe
 275 280 285
 Thr Ser Arg Glu Asp Ala Val His Ala Met Asn Asn Leu Asn Gly Thr
 290 295 300

Glu Leu Glu Gly Ser Cys Leu Glu Val Thr Leu Ala Lys Pro Val Asp
 305 310 315 320
 Lys Glu Gln Tyr Ser Arg Tyr Gln Lys Ala Ala Arg Gly Gly Gly Ala
 325 330 335
 Ala Glu Ala Ala Gln Gln Pro Ser Tyr Val Tyr Ser Cys Asp Pro Tyr
 340 345 350
 Thr Leu Ala Tyr Tyr Gly Tyr Pro Tyr Asn Ala Leu Ile Gly Pro Asn
 355 360 365
 Arg Asp Tyr Phe Val Lys Val Ala Ile Pro Ala Ile Gly Ala Gln Tyr
 370 375 380
 Ser Met Phe Pro Ala Ala Pro Ala Pro Lys Met Ile Glu Asp Gly Lys
 385 390 395 400
 Ile His Thr Val Glu His Met Ile Ser Pro Ile Ala Val Gln Pro Asp
 405 410 415
 Pro Ala Ser Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala
 420 425 430
 Ala Val Ile Pro Thr Val Ser Thr Pro Pro Pro Phe Gln Gly Arg Pro
 435 440 445
 Ile Thr Pro Val Tyr Thr Val Ala Pro Asn Val Gln Arg Ile Pro Thr
 450 455 460
 Ala Gly Ile Tyr Gly Ala Ser Tyr Val Pro Phe Ala Ala Pro Ala Thr
 465 470 475 480
 Ala Thr Ile Ala Thr Leu Gln Lys Asn Ala Ala Ala Ala Ala Val
 485 490 495
 Tyr Gly Gly Tyr Ala Gly Tyr Ile Pro Gln Ala Phe Pro Ala Ala
 500 505 510
 Ile Gln Val Pro Ile Pro Asp Val Tyr Gln Thr Tyr
 515 520

<210> 295
 <211> 1232
 <212> PRT
 <213> Homo sapiens
 <400> 295

Met Lys Glu Glu Val Lys Gly Ile Pro Val Arg Val Ala Leu Arg Cys
 1 5 10 15
 Arg Pro Leu Val Pro Lys Glu Ile Ser Glu Gly Cys Gln Met Cys Leu
 20 25 30
 Ser Phe Val Pro Gly Glu Pro Gln Val Val Val Gly Thr Asp Lys Ser
 35 40 45
 Phe Thr Tyr Asp Phe Val Phe Asp Pro Ser Thr Glu Gln Glu Glu Val
 50 55 60
 Phe Asn Thr Ala Val Ala Pro Leu Ile Lys Gly Val Phe Lys Gly Tyr
 65 70 75 80
 Asn Ala Thr Val Leu Ala Tyr Gly Gln Thr Gly Ser Gly Lys Thr Tyr
 85 90 95
 Ser Met Gly Gly Ala Tyr Thr Ala Glu Gln Glu Asn Glu Pro Thr Val
 100 105 110
 Gly Val Ile Pro Arg Val Ile Gln Leu Leu Phe Lys Glu Ile Asp Lys
 115 120 125
 Lys Ser Asp Phe Glu Phe Thr Leu Lys Val Ser Tyr Leu Glu Ile Tyr
 130 135 140
 Asn Glu Glu Ile Leu Asp Leu Leu Cys Pro Ser Arg Glu Lys Ala Gln
 145 150 155 160
 Ile Asn Ile Arg Glu Asp Pro Lys Glu Gly Ile Lys Ile Val Gly Leu
 165 170 175
 Thr Glu Lys Thr Val Leu Val Ala Leu Asp Thr Val Ser Cys Leu Glu
 180 185 190
 Gln Gly Asn Asn Ser Arg Thr Val Ala Ser Thr Ala Met Asn Ser Gln
 195 200 205
 Ser Ser Arg Ser His Ala Ile Phe Thr Ile Ser Leu Glu Gln Gly Lys
 210 215 220
 Lys Ser Asp Lys Asn Ser Ser Phe Arg Ser Lys Leu His Leu Val Asp
 225 230 235 240
 Leu Ala Gly Ser Glu Arg Gln Lys Lys Thr Lys Ala Glu Gly Asp Arg
 245 250 255
 Leu Lys Glu Gly Ile Asn Ile Asn Arg Gly Leu Leu Cys Leu Gly Asn
 260 265 270
 Val Ile Ser Ala Leu Gly Asp Asp Lys Lys Gly Gly Phe Ala Pro Tyr

275	280	285
Arg Asp Ser Lys Leu Thr	Arg Leu Leu Gln Asp Ser	Leu Gly Gly Asn
290	295	300
Ser His Thr Leu Met Ile	Ala Cys Val Ser Pro	Ala Asp Ser Asn Leu
305	310	315
Glu Glu Thr Leu Asn Thr	Leu Arg Tyr Ala Asp	Arg Ala Arg Lys Ile
325	330	335
Lys Asn Lys Pro Ile Val	Asn Ile Asp Pro Gln	Thr Ala Glu Leu Asn
340	345	350
His Leu Lys Gln Gln Val	Gln Gln Leu Gln Val	Leu Leu Leu Gln Ala
355	360	365
His Gly Gly Thr Leu Pro	Gly Ser Ile Thr Val	Glu Pro Ser Glu Asn
370	375	380
Leu Gln Ser Leu Met Glu	Lys Asn Gln Ser Leu	Val Glu Glu Asn Glu
385	390	395
Lys Leu Ser Arg Gly Leu	Ser Glu Ala Ala Gly	Gln Thr Ala Gln Met
405	410	415
Leu Glu Arg Ile Ile Trp	Thr Glu Gln Ala Asn	Glu Lys Met Asn Ala
420	425	430
Lys Leu Glu Glu Leu Arg	Gln His Ala Ala Cys	Lys Leu Asp Leu Gln
435	440	445
Lys Leu Val Glu Thr Leu	Glu Asp Gln Glu Leu	Lys Glu Asn Val Glu
450	455	460
Ile Ile Cys Asn Leu Gln	Gln Leu Ile Thr Gln	Leu Ser Asp Glu Thr
465	470	475
Val Ala Cys Met Ala Ala	Ile Asp Thr Ala Val	Glu Gln Glu Ala
485	490	495
Gln Val Glu Thr Ser Pro	Glu Thr Ser Arg Ser	Ser Asp Ala Phe Thr
500	505	510
Thr Gln His Ala Leu Arg	Gln Ala Gln Met Ser	Lys Glu Leu Val Glu
515	520	525
Leu Asn Lys Ala Leu Ala	Leu Lys Glu Ala Leu	Ala Arg Lys Met Thr
530	535	540
Gln Asn Asp Ser Gln Leu	Gln Pro Ile Gln Tyr	Gln Tyr Gln Asp Asn
545	550	555
Ile Lys Glu Pro Glu Leu	Glu Val Ile Asn Leu	Gln Lys Glu Lys Glu
565	570	575
Glu Leu Val Leu Glu Leu	Gln Thr Ala Lys Lys	Asp Ala Asn Gln Ala
580	585	590
Lys Leu Ser Glu Arg Arg	Arg Lys Arg Leu Gln	Glu Leu Glu Gly Gln
595	600	605
Ile Ala Asp Leu Lys Lys	Lys Leu Asn Glu Gln	Ser Lys Leu Leu Lys
610	615	620
Leu Lys Glu Ser Thr Glu	Arg Thr Val Ser Lys	Leu Asn Gln Glu Ile
625	630	635
Arg Met Met Lys Asn Gln	Arg Val Gln Leu Met	Arg Gln Met Lys Glu
645	650	655
Asp Ala Glu Lys Phe Arg	Gln Trp Lys Gln Lys	Arg Asp Lys Glu Val
660	665	670
Ile Gln Leu Lys Glu Arg	Asp Arg Lys Arg Gln	Tyr Glu Leu Leu Lys
675	680	685
Leu Glu Arg Asn Phe Gln	Lys Gln Ser Asn Val	Leu Arg Arg Lys Thr
690	695	700
Glu Glu Ala Ala Ala Ala	Asn Lys Arg Leu Lys	Asp Ala Leu Gln Lys
705	710	715
Gln Arg Glu Val Ala Asp	Lys Arg Lys Glu Thr	Gln Ser Arg Gly Met
725	730	735
Glu Gly Thr Ala Ala Arg	Val Lys Asn Trp Leu	Gly Asn Glu Ile Glu
740	745	750
Val Met Val Ser Thr Glu	Glu Ala Lys Arg His	Leu Asn Asp Leu Leu
755	760	765
Glu Asp Arg Lys Ile Leu	Ala Gln Asp Val Ala	Gln Leu Lys Glu Lys
770	775	780
Lys Glu Ser Gly Glu Asn	Pro Pro Pro Lys	Leu Arg Arg Arg Thr
785	790	795
Ser Leu Thr Glu Val Arg	Gly Gln Val Ser	Glu Ser Glu Asp Ser
805	810	815
Thr Lys Gln Ile Glu Ser	Leu Glu Thr Glu	Met Glu Phe Arg Ser
820	825	830

Gln Ile Ala Asp Leu Gln Gln Lys Leu Leu Asp Ala Glu Ser Glu Asp
 835 840 845
 Arg Pro Lys Gln Arg Trp Glu Asn Ile Ala Thr Ile Leu Glu Ala Lys
 850 855 860
 Cys Ala Leu Lys Tyr Leu Ile Gly Glu Leu Val Ser Ser Lys Ile Gln
 865 870 875 880
 Val Ser Lys Leu Glu Ser Ser Leu Lys Gln Ser Lys Thr Ser Cys Ala
 885 890 895
 Asp Met Gln Lys Met Leu Phe Glu Glu Arg Asn His Phe Ala Glu Ile
 900 905 910
 Glu Thr Glu Leu Gln Ala Glu Leu Val Arg Met Glu Gln Gln His Gln
 915 920 925
 Glu Lys Val Leu Tyr Leu Leu Ser Gln Leu Gln Gln Ser Gln Met Ala
 930 935 940
 Glu Lys Gln Leu Glu Glu Ser Val Ser Glu Lys Glu Gln Gln Leu Leu
 945 950 955 960
 Ser Thr Leu Lys Cys Gln Asp Glu Glu Leu Glu Lys Met Arg Glu Val
 965 970 975
 Cys Glu Gln Asn Gln Gln Leu Leu Arg Glu Asn Glu Ile Ile Lys Gln
 980 985 990
 Lys Leu Thr Leu Leu Gln Val Ala Ser Arg Gln Lys His Leu Pro Lys
 995 1000 1005
 Asp Thr Leu Leu Ser Pro Asp Ser Ser Phe Glu Tyr Val Gln Pro
 1010 1015 1020
 Lys Pro Lys Pro Ser Arg Val Lys Glu Lys Phe Leu Glu Gln Ser
 1025 1030 1035
 Met Asp Ile Glu Asp Leu Lys Tyr Cys Ser Glu His Ser Val Asn
 1040 1045 1050
 Glu His Glu Asp Gly Asp Gly Asp Asp Asp Glu Gly Asp Asp Glu
 1055 1060 1065
 Glu Trp Lys Pro Thr Lys Leu Val Asn Val Ser Arg Lys Asn Ile
 1070 1075 1080
 Gln Gly Cys Ser Cys Lys Gly Trp Cys Gly Asn Lys Gln Cys Gly
 1085 1090 1095
 Cys Arg Lys Gln Lys Ser Asp Cys Gly Val Asp Cys Cys Cys Asp
 1100 1105 1110
 Pro Thr Lys Cys Arg Asn Arg Gln Gln Gly Lys Asp Ser Leu Gly
 1115 1120 1125
 Thr Val Glu Arg Thr Gln Asp Ser Glu Ser Ser Phe Lys Leu Glu
 1130 1135 1140
 Asp Pro Thr Glu Val Thr Pro Gly Leu Ser Phe Phe Asn Pro Val
 1145 1150 1155
 Cys Ala Thr Pro Asn Ser Lys Ile Leu Lys Glu Met Cys Asp Val
 1160 1165 1170
 Glu Gln Val Leu Ser Lys Lys Thr Pro Pro Ala Pro Ser Pro Phe
 1175 1180 1185
 Asp Leu Pro Glu Leu Lys His Val Ala Thr Glu Tyr Gln Glu Asn
 1190 1195 1200
 Lys Ala Pro Gly Lys Lys Lys Lys Arg Ala Leu Ala Ser Asn Thr
 1205 1210 1215
 Ser Phe Phe Ser Gly Cys Ser Pro Ile Glu Glu Glu Ala His
 1220 1225 1230

<210> 296

<211> 230

<212> PRT

<213> Homo sapiens

<400> 296

Met Ala Gln Gly Leu Ile Glu Val Glu Arg Lys Phe Leu Pro Gly Pro
 1 5 10 15
 Gly Thr Glu Glu Arg Leu Gln Glu Leu Gly Gly Thr Leu Glu Tyr Arg
 20 25 30
 Val Thr Phe Arg Asp Thr Tyr Tyr Asp Thr Pro Glu Leu Ser Leu Met
 35 40 45
 Gln Ala Asp His Trp Leu Arg Arg Arg Glu Asp Ser Gly Trp Glu Leu
 50 55 60
 Lys Cys Pro Gly Ala Ala Gly Val Leu Gly Pro His Thr Glu Tyr Lys
 65 70 75 80
 Glu Leu Thr Ala Glu Pro Thr Ile Val Ala Gln Leu Cys Lys Val Leu

85 90 95
 Arg Ala Asp Gly Leu Gly Ala Gly Asp Val Ala Ala Val Leu Gly Pro
 100 105 110
 Leu Gly Leu Gln Glu Val Ala Ser Phe Val Thr Lys Arg Ser Ala Trp
 115 120 125
 Lys Leu Val Leu Leu Gly Ala Asp Glu Glu Glu Pro Gln Leu Arg Val
 130 135 140
 Asp Leu Asp Thr Ala Asp Phe Gly Tyr Ala Val Gly Glu Val Glu Ala
 145 150 155 160
 Leu Val His Glu Glu Ala Glu Val Pro Thr Ala Leu Glu Lys Ile His
 165 170 175
 Arg Leu Ser Ser Met Leu Gly Val Pro Ala Gln Glu Thr Ala Pro Ala
 180 185 190
 Lys Leu Ile Val Tyr Leu Gln Arg Phe Arg Pro Gln Asp Tyr Gln Arg
 195 200 205
 Leu Leu Glu Val Asn Ser Ser Arg Glu Arg Pro Gln Glu Thr Glu Asp
 210 215 220
 Pro Asp His Cys Leu Gly
 225 230

<210> 297
 <211> 329
 <212> PRT
 <213> Homo sapiens
 <400> 297

Met Ser Gly Val Val Pro Thr Ala Pro Glu Gln Pro Ala Gly Glu Met
 1 5 10 15
 Glu Asn Gln Thr Lys Pro Pro Asp Pro Arg Pro Asp Ala Pro Pro Glu
 20 25 30
 Tyr Ser Ser His Phe Leu Pro Gly Pro Pro Gly Thr Ala Val Pro Pro
 35 40 45
 Pro Thr Gly Tyr Pro Gly Gly Leu Pro Met Gly Tyr Ser Pro Gln
 50 55 60
 Gln Pro Ser Thr Phe Pro Leu Tyr Gln Pro Val Gly Gly Ile His Pro
 65 70 75 80
 Val Arg Tyr Gln Pro Gly Lys Tyr Pro Met Pro Asn Gln Ser Val Pro
 85 90 95
 Ile Thr Trp Met Pro Gly Pro Thr Pro Met Ala Asn Cys Pro Pro Gly
 100 105 110
 Leu Glu Tyr Leu Val Gln Leu Asp Asn Ile His Val Leu Gln His Phe
 115 120 125
 Glu Pro Leu Glu Met Met Thr Cys Phe Glu Thr Asn Asn Arg Tyr Asp
 130 135 140
 Ile Lys Asn Asn Ser Asp Gln Met Val Tyr Val Val Thr Glu Asp Thr
 145 150 155 160
 Asp Asp Phe Thr Arg Asn Ala Tyr Arg Thr Leu Arg Pro Phe Val Leu
 165 170 175
 Arg Val Thr Asp Cys Met Gly Arg Glu Ile Met Thr Met Gln Arg Pro
 180 185 190
 Phe Arg Cys Thr Cys Cys Cys Phe Cys Cys Pro Ser Ala Arg Gln Glu
 195 200 205
 Leu Glu Val Gln Cys Pro Pro Gly Val Thr Ile Gly Phe Val Ala Glu
 210 215 220
 His Trp Asn Leu Cys Arg Ala Val Tyr Ser Ile Gln Asn Glu Lys Lys
 225 230 235 240
 Glu Asn Val Met Arg Val Arg Gly Pro Cys Ser Thr Tyr Gly Cys Gly
 245 250 255
 Ser Asp Ser Val Phe Glu Val Lys Ser Leu Asp Gly Ile Ser Asn Ile
 260 265 270
 Gly Ser Ile Ile Arg Lys Trp Asn Gly Leu Leu Ser Ala Met Ala Asp
 275 280 285
 Ala Asp His Phe Asp Ile His Phe Pro Leu Asp Leu Asp Val Lys Met
 290 295 300
 Lys Ala Met Ile Phe Gly Ala Cys Phe Leu Ile Asp Phe Met Tyr Phe
 305 310 315 320
 Glu Arg Ser Pro Pro Gln Arg Ser Arg
 325

<210> 298

<211> 323
 <212> PRT
 <213> Homo sapiens
 <400> 298

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Met Gly Gly Gln Val Ser Ala Ser Asn Ser Phe Ser Arg Leu His Cys
1      5      10      15
Arg Asn Ala Asn Glu Asp Trp Met Ser Ala Leu Cys Pro Arg Leu Trp
20      25      30
Asp Val Pro Leu His His Leu Ser Ile Pro Gly Ser His Asp Thr Met
35      40      45
Thr Tyr Cys Leu Asn Lys Lys Ser Pro Ile Ser His Glu Glu Ser Arg
50      55      60
Leu Leu Gln Leu Leu Asn Lys Ala Leu Pro Cys Ile Thr Arg Pro Val
65      70      75      80
Val Leu Lys Trp Ser Val Thr Gln Ala Leu Asp Val Thr Glu Gln Leu
85      90      95
Asp Ala Gly Val Arg Tyr Leu Asp Leu Arg Ile Ala His Met Leu Glu
100      105      110
Gly Ser Glu Lys Asn Leu His Phe Val His Met Val Tyr Thr Thr Ala
115      120      125
Leu Val Glu Asp Thr Leu Thr Glu Ile Ser Glu Trp Leu Glu Arg His
130      135      140
Pro Arg Glu Val Val Ile Leu Ala Cys Arg Asn Phe Glu Gly Leu Ser
145      150      155      160
Glu Asp Leu His Glu Tyr Leu Val Ala Cys Ile Lys Asn Ile Phe Gly
165      170      175
Asp Met Leu Cys Pro Arg Gly Glu Val Pro Thr Leu Arg Gln Leu Trp
180      185      190
Ser Arg Gly Gln Gln Val Ile Val Ser Tyr Glu Asp Glu Ser Ser Leu
195      200      205
Arg Arg His His Glu Leu Trp Pro Gly Val Pro Tyr Trp Trp Gly Asn
210      215      220
Arg Val Lys Thr Glu Ala Leu Ile Arg Tyr Leu Glu Thr Met Lys Ser
225      230      235      240
Cys Gly Arg Pro Gly Gly Leu Phe Val Ala Gly Ile Asn Leu Thr Glu
245      250      255
Asn Leu Gln Tyr Val Leu Ala His Pro Ser Glu Ser Leu Glu Lys Met
260      265      270
Thr Leu Pro Asn Leu Pro Arg Leu Ser Ala Trp Val Arg Glu Gln Cys
275      280      285
Pro Gly Pro Gly Ser Arg Cys Thr Asn Ile Ile Ala Gly Asp Phe Ile
290      295      300
Gly Ala Asp Gly Phe Val Ser Asp Val Ile Ala Leu Asn Gln Lys Leu
305      310      315      320
Leu Trp Cys

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<210> 299
 <211> 103
 <212> PRT
 <213> Homo sapiens
 <400> 299

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Met Thr Thr Glu Ile Gly Trp Trp Lys Leu Thr Phe Leu Arg Lys Lys
1      5      10      15
Lys Ser Thr Pro Lys Val Leu Tyr Glu Ile Pro Asp Thr Tyr Ala Gln
20      25      30
Thr Glu Gly Asp Ala Glu Pro Pro Arg Pro Asp Ala Gly Gly Pro Asn
35      40      45
Ser Asp Phe Asn Thr Arg Leu Glu Lys Ile Val Asp Lys Ser Thr Lys
50      55      60
Gly Lys His Val Lys Val Ser Asn Ser Gly Arg Phe Lys Glu Lys Lys
65      70      75      80
Lys Val Arg Ala Thr Leu Ala Glu Asn Pro Asn Leu Phe Asp Asp His
85      90      95
Glu Glu Gly Arg Ser Ser Lys
100

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<210> 300
 <211> 999

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<212> PRT
<213> Homo sapiens
<400> 300
Met Gly Val Ala Gly Arg Asn Arg Pro Gly Ala Ala Trp Ala Val Leu
1      5      10      15
Leu Leu Leu Leu Leu Pro Pro Leu Leu Leu Ala Gly Ala Val
20      25      30
Pro Pro Gly Arg Gly Arg Ala Ala Gly Pro Gln Glu Asp Val Asp Glu
35      40      45
Cys Ala Gln Gly Leu Asp Asp Cys His Ala Asp Ala Leu Cys Gln Asn
50      55      60
Thr Pro Thr Ser Tyr Lys Cys Ser Cys Lys Pro Gly Tyr Gln Gly Glu
65      70      75      80
Gly Arg Gln Cys Glu Asp Ile Asp Glu Cys Gly Asn Glu Leu Asn Gly
85      90      95
Gly Cys Val His Asp Cys Leu Asn Ile Pro Gly Asn Tyr Arg Cys Thr
100     105     110
Cys Phe Asp Gly Phe Met Leu Ala His Asp Gly His Asn Cys Leu Asp
115     120     125
Val Asp Glu Cys Leu Glu Asn Asn Gly Gly Cys Gln His Thr Cys Val
130     135     140
Asn Val Met Gly Ser Tyr Thr Cys Cys Cys Lys Glu Gly Phe Phe Leu
145     150     155     160
Ser Asp Asn Gln His Thr Cys Ile His Arg Ser Glu Glu Gly Leu Ser
165     170     175
Cys Met Asn Lys Asp His Gly Cys Ser His Ile Cys Lys Glu Ala Pro
180     185     190
Arg Gly Ser Val Ala Cys Glu Cys Arg Pro Gly Phe Glu Leu Ala Lys
195     200     205
Asn Gln Arg Asp Cys Ile Leu Thr Cys Asn His Gly Asn Gly Gly Cys
210     215     220
Gln His Ser Cys Asp Asp Thr Ala Asp Gly Pro Glu Cys Ser Cys His
225     230     235     240
Pro Gln Tyr Lys Met His Thr Asp Gly Arg Ser Cys Leu Glu Arg Glu
245     250     255
Asp Thr Val Leu Glu Val Thr Glu Ser Asn Thr Thr Ser Val Val Asp
260     265     270
Gly Asp Lys Arg Val Lys Arg Arg Leu Leu Met Glu Thr Cys Ala Val
275     280     285
Asn Asn Gly Gly Cys Asp Arg Thr Cys Lys Asp Thr Ser Thr Gly Val
290     295     300
His Cys Ser Cys Pro Val Gly Phe Thr Leu Gln Leu Asp Gly Lys Thr
305     310     315     320
Cys Lys Asp Ile Asp Glu Cys Gln Thr Arg Asn Gly Gly Cys Asp His
325     330     335
Phe Cys Lys Asn Ile Val Gly Ser Phe Asp Cys Gly Cys Lys Lys Gly
340     345     350
Phe Lys Leu Leu Thr Asp Glu Lys Ser Cys Gln Asp Val Asp Glu Cys
355     360     365
Ser Leu Asp Arg Thr Cys Asp His Ser Cys Ile Asn His Pro Gly Thr
370     375     380
Phe Ala Cys Ala Cys Asn Arg Gly Tyr Thr Leu Tyr Gly Phe Thr His
385     390     395     400
Cys Gly Asp Thr Asn Glu Cys Ser Ile Asn Asn Gly Gly Cys Gln Gln
405     410     415
Val Cys Val Asn Thr Val Gly Ser Tyr Glu Cys Gln Cys His Pro Gly
420     425     430
Tyr Lys Leu His Trp Asn Lys Lys Asp Cys Val Glu Val Lys Gly Leu
435     440     445
Leu Pro Thr Ser Val Ser Pro Arg Val Ser Leu His Cys Gly Lys Ser
450     455     460
Gly Gly Gly Asp Gly Cys Phe Leu Arg Cys His Ser Gly Ile His Leu
465     470     475     480
Ser Ser Asp Val Thr Thr Ile Arg Thr Ser Val Thr Phe Lys Leu Asn
485     490     495
Glu Gly Lys Cys Ser Leu Lys Asn Ala Glu Leu Phe Pro Glu Gly Leu
500     505     510
Arg Pro Ala Leu Pro Glu Lys His Ser Ser Val Lys Glu Ser Phe Arg
515     520     525

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Tyr Val Asn Leu Thr Cys Ser Ser Gly Lys Gln Val Pro Gly Ala Pro
 530 535 540
 Gly Arg Pro Ser Thr Pro Lys Glu Met Phe Ile Thr Val Glu Phe Glu
 545 550 555 560
 Leu Glu Thr Asn Gln Lys Glu Val Thr Ala Ser Cys Asp Leu Ser Cys
 565 570 575
 Ile Val Lys Arg Thr Glu Lys Arg Leu Arg Lys Ala Ile Arg Thr Leu
 580 585 590
 Arg Lys Ala Val His Arg Glu Gln Phe His Leu Gln Leu Ser Gly Met
 595 600 605
 Asn Leu Asp Val Ala Lys Lys Pro Pro Arg Thr Ser Glu Arg Gln Ala
 610 615 620
 Glu Ser Cys Gly Val Gly Gln Gly His Ala Glu Asn Gln Cys Val Ser
 625 630 635 640
 Cys Arg Ala Gly Thr Tyr Tyr Asp Gly Ala Arg Glu Arg Cys Ile Leu
 645 650 655
 Cys Pro Asn Gly Thr Phe Gln Asn Glu Gly Gln Met Thr Cys Glu
 660 665 670
 Pro Cys Pro Arg Pro Gly Asn Ser Gly Ala Leu Lys Thr Pro Glu Ala
 675 680 685
 Trp Asn Met Ser Glu Cys Gly Gly Leu Cys Gln Pro Gly Glu Tyr Ser
 690 695 700
 Ala Asp Gly Phe Ala Pro Cys Gln Leu Cys Ala Leu Gly Thr Phe Gln
 705 710 715 720
 Pro Glu Ala Gly Arg Thr Ser Cys Phe Pro Cys Gly Gly Gly Leu Ala
 725 730 735
 Thr Lys His Gln Gly Ala Thr Ser Phe Gln Asp Cys Glu Thr Arg Val
 740 745 750
 Gln Cys Ser Pro Gly His Phe Tyr Asn Thr Thr Thr His Arg Cys Ile
 755 760 765
 Arg Cys Pro Val Gly Thr Tyr Gln Pro Glu Phe Gly Lys Asn Asn Cys
 770 775 780
 Val Ser Cys Pro Gly Asn Thr Thr Thr Asp Phe Asp Gly Ser Thr Asn
 785 790 795 800
 Ile Thr Gln Cys Lys Asn Arg Arg Cys Gly Gly Glu Leu Gly Asp Phe
 805 810 815
 Thr Gly Tyr Ile Glu Ser Pro Asn Tyr Pro Gly Asn Tyr Pro Ala Asn
 820 825 830
 Thr Glu Cys Thr Trp Thr Ile Asn Pro Pro Pro Lys Arg Arg Ile Leu
 835 840 845
 Ile Val Val Pro Glu Ile Phe Leu Pro Ile Glu Asp Asp Cys Gly Asp
 850 855 860
 Tyr Leu Val Met Arg Lys Thr Ser Ser Ser Asn Ser Val Thr Thr Tyr
 865 870 875 880
 Glu Thr Cys Gln Thr Tyr Glu Arg Pro Ile Ala Phe Thr Ser Arg Ser
 885 890 895
 Lys Lys Leu Trp Ile Gln Phe Lys Ser Asn Glu Gly Asn Ser Ala Arg
 900 905 910
 Gly Phe Gln Val Pro Tyr Val Thr Tyr Asp Glu Asp Tyr Gln Glu Leu
 915 920 925
 Ile Glu Asp Ile Val Arg Asp Gly Arg Leu Tyr Ala Ser Glu Asn His
 930 935 940
 Gln Glu Ile Leu Lys Asp Lys Lys Leu Ile Lys Ala Leu Phe Asp Val
 945 950 955 960
 Leu Ala His Pro Gln Asn Tyr Phe Lys Tyr Thr Ala Gln Glu Ser Arg
 965 970 975
 Glu Met Phe Pro Arg Ser Phe Ile Arg Leu Leu Arg Ser Lys Val Ser
 980 985 990
 Arg Phe Leu Arg Pro Tyr Lys 995

<210> 301

<211> 340

<212> PRT

<213> Homo sapiens

<400> 301

Met Cys Ala Gln Tyr Cys Ile Ser Phe Ala Asp Val Glu Lys Ala His
 1 5 10 15
 Ile Asn Ile Arg Asp Ser Ile His Leu Thr Pro Val Leu Thr Ser Ser

20 25 30
 Ile Leu Asn Gln Leu Thr Gly Arg Asn Leu Phe Phe Lys Cys Glu Leu
 35 40 45
 Phe Gln Lys Thr Gly Ser Phe Lys Ile Arg Gly Ala Leu Asn Ala Val
 50 55 60
 Arg Ser Leu Val Pro Asp Ala Leu Glu Arg Lys Pro Lys Ala Val Val
 65 70 75 80
 Thr His Ser Ser Gly Asn His Gly Gln Ala Leu Thr Tyr Ala Ala Lys
 85 90 95
 Leu Glu Gly Ile Pro Ala Tyr Ile Val Val Pro Gln Thr Ala Pro Asp
 100 105 110
 Cys Lys Lys Leu Ala Ile Gln Ala Tyr Gly Ala Ser Ile Val Tyr Cys
 115 120 125
 Glu Pro Ser Asp Glu Ser Arg Glu Asn Val Ala Lys Arg Val Thr Glu
 130 135 140
 Glu Thr Glu Gly Ile Met Val His Pro Asn Gln Glu Pro Ala Val Ile
 145 150 155 160
 Ala Gly Gln Gly Thr Ile Ala Leu Glu Val Leu Asn Gln Val Pro Leu
 165 170 175
 Val Asp Ala Leu Val Val Pro Val Gly Gly Gly Met Leu Ala Gly
 180 185 190
 Ile Ala Ile Thr Val Lys Ala Leu Lys Pro Ser Val Lys Val Tyr Ala
 195 200 205
 Ala Glu Pro Ser Asn Ala Asp Asp Cys Tyr Gln Ser Lys Leu Lys Gly
 210 215 220
 Lys Leu Met Pro Asn Leu Tyr Pro Pro Glu Thr Ile Ala Asp Gly Val
 225 230 235 240
 Lys Ser Ser Ile Gly Leu Asn Thr Trp Pro Ile Ile Arg Asp Leu Val
 245 250 255
 Asp Asp Ile Phe Thr Val Thr Glu Asp Glu Ile Lys Cys Ala Thr Gln
 260 265 270
 Leu Val Trp Glu Arg Met Lys Leu Leu Ile Glu Pro Thr Ala Gly Val
 275 280 285
 Gly Val Ala Ala Val Leu Ser Gln His Phe Gln Thr Val Ser Pro Glu
 290 295 300
 Val Lys Asn Ile Cys Ile Val Leu Ser Gly Gly Asn Val Asp Leu Thr
 305 310 315 320
 Ser Ser Ile Thr Trp Val Lys Gln Ala Glu Arg Pro Ala Ser Tyr Gln
 325 330 335
 Ser Val Ser Val
 340

<210> 302
 <211> 218
 <212> PRT
 <213> Homo sapiens
 <400> 302

Met Asn Arg Leu Phe Gly Lys Ala Lys Pro Lys Ala Pro Arg Pro Ser
 1 5 10 15
 Leu Thr Asp Cys Ile Gly Thr Val Asp Ser Arg Ala Glu Ser Ile Asp
 20 25 30
 Lys Lys Ile Ser Arg Leu Asp Ala Glu Leu Val Lys Tyr Lys Asp Gln
 35 40 45
 Ile Lys Lys Met Arg Glu Gly Pro Ala Lys Asn Met Val Lys Gln Lys
 50 55 60
 Ala Leu Arg Val Leu Lys Gln Lys Arg Met Tyr Glu Gln Gln Arg Asp
 65 70 75 80
 Asn Leu Ala Asn Ser His Ser Thr Trp Thr Gly His Tyr Thr Ile Gln
 85 90 95
 Ser Leu Lys Asp Thr Lys Thr Thr Val Asp Ala Met Lys Leu Gly Val
 100 105 110
 Lys Glu Met Lys Lys Ala Tyr Lys Pro Val Lys Ile Asp Gln Ile Glu
 115 120 125
 Asp Leu Gln Asp Gln Leu Glu Asp Met Met Glu Asp Ala Asn Glu Ile
 130 135 140
 Gln Glu Ala Leu Ser Arg Ser Tyr Gly Thr Pro Glu Leu Asp Glu Asp
 145 150 155 160
 Asp Leu Glu Ala Glu Leu Asp Ala Leu Gly Asp Glu Leu Leu Ala Asp
 165 170 175

Glu Asp Ser Ser Tyr Leu Asp Glu Ala Ala Ser Ala Pro Ala Ile Pro
 180 185 190
 Glu Gly Val Pro Thr Asp Thr Lys Asn Lys Asp Gly Val Leu Val Asp
 195 200 205
 Glu Phe Gly Leu Pro Gln Ile Pro Ala Ser
 210 215

<210> 303
 <211> 635
 <212> PRT
 <213> Homo sapiens
 <400> 303

Met Ala Pro Pro Leu Leu Leu Leu Leu Ala Ser Gly Ala Ala Ala
 1 5 10 15
 Cys Pro Leu Pro Cys Val Cys Gln Asn Leu Ser Glu Ser Leu Ser Thr
 20 25 30
 Leu Cys Ala His Arg Gly Leu Leu Phe Val Pro Pro Asn Val Asp Arg
 35 40 45
 Arg Thr Val Glu Leu Arg Leu Ala Asp Asn Phe Ile Gln Ala Leu Gly
 50 55 60
 Pro Pro Asp Phe Arg Asn Met Thr Gly Leu Val Asp Leu Thr Leu Ser
 65 70 75 80
 Arg Asn Ala Ile Thr Arg Ile Gly Ala Arg Ala Phe Gly Asp Leu Glu
 85 90 95
 Ser Leu Arg Ser Leu His Leu Asp Gly Asn Arg Leu Val Glu Leu Gly
 100 105 110
 Thr Gly Ser Leu Arg Gly Pro Val Asn Leu Gln His Leu Ile Leu Ser
 115 120 125
 Gly Asn Gln Leu Gly Arg Ile Ala Pro Gly Ala Phe Asp Asp Phe Leu
 130 135 140
 Glu Ser Leu Glu Asp Leu Asp Leu Ser Tyr Asn Asn Leu Arg Gln Val
 145 150 155 160
 Pro Trp Ala Gly Ile Gly Ala Met Pro Ala Leu His Thr Leu Asn Leu
 165 170 175
 Asp His Asn Leu Ile Asp Ala Leu Pro Gly Ala Phe Ala Gln Leu
 180 185 190
 Gly Gln Leu Ser Arg Leu Asp Leu Thr Ser Asn Arg Leu Ala Thr Leu
 195 200 205
 Ala Pro Asp Pro Leu Phe Ser Arg Gly Arg Asp Ala Glu Ala Ser Pro
 210 215 220
 Ala Pro Leu Val Leu Ser Phe Ser Gly Asn Pro Leu His Cys Asn Cys
 225 230 235 240
 Glu Leu Leu Trp Leu Arg Arg Leu Ala Arg Pro Asp Asp Leu Glu Thr
 245 250 255
 Cys Ala Ser Pro Pro Gly Leu Ala Gly Arg Tyr Phe Trp Ala Val Pro
 260 265 270
 Glu Gly Glu Phe Ser Cys Glu Pro Pro Leu Ile Ala Arg His Thr Gln
 275 280 285
 Arg Leu Trp Val Leu Glu Gly Gln Arg Ala Thr Leu Arg Cys Arg Ala
 290 295 300
 Leu Gly Asp Pro Ala Pro Thr Met His Trp Val Gly Pro Asp Asp Arg
 305 310 315 320
 Leu Val Gly Asn Ser Ser Arg Ala Arg Ala Phe Pro Asn Gly Thr Leu
 325 330 335
 Glu Ile Gly Val Thr Gly Ala Gly Asp Ala Gly Gly Tyr Thr Cys Ile
 340 345 350
 Ala Thr Asn Pro Ala Gly Glu Ala Thr Ala Arg Val Glu Leu Arg Val
 355 360 365
 Leu Ala Leu Pro His Gly Gly Asn Ser Ser Ala Glu Gly Gly Arg Pro
 370 375 380
 Gly Pro Ser Asp Ile Ala Ala Ser Ala Arg Thr Ala Ala Glu Gly Glu
 385 390 395 400
 Gly Thr Leu Glu Ser Glu Pro Ala Val Gln Val Thr Glu Val Thr Ala
 405 410 415
 Thr Ser Gly Leu Val Ser Trp Gly Pro Gly Arg Pro Ala Asp Pro Val
 420 425 430
 Trp Met Phe Gln Ile Gln Tyr Asn Ser Ser Glu Asp Glu Thr Leu Ile
 435 440 445
 Tyr Arg Ile Val Pro Ala Ser Ser His His Phe Leu Leu Lys His Leu

450 Val Pro Gly Ala Asp Tyr Asp Leu Cys Leu Leu 460
 465 Ala Gly Pro Ser Asp Leu Thr Ala Thr Arg Leu Leu Gly Cys Ala His 480
 Phe Ser Thr Leu Pro Ala Ser Pro Leu Cys His Ala Leu Gln Ala His 495
 Val Leu Gly Gly Thr Leu Thr Val Ala Val Gly Gly Val Leu Val Ala 510
 Ala Leu Leu Val Phe Thr Val Ala Leu Leu Val Arg Gly Arg Gly Ala 525
 Gly Asn Gly Arg Leu Pro Leu Lys Leu Ser His Val Gln Ser Gln Thr 540
 545 Asn Gly Gly Pro Ser Pro Thr Pro Lys Ala His Pro Pro Arg Ser Pro 555
 Pro Pro Arg Pro Gln Arg Ser Cys Ser Leu Asp Leu Gly Asp Ala Gly 570
 Cys Tyr Gly Tyr Ala Arg Arg Leu Gly Gly Ala Trp Ala Arg Arg Ser 585
 His Ser Val His Gly Gly Leu Leu Gly Ala Gly Cys Arg Gly Val Gly 590
 Gly Ser Ala Glu Arg Leu Glu Glu Ser Val Val 605
 625 630 635

<210> 304
 <211> 498
 <212> PRT
 <213> Homo sapiens
 <400> 304

Met Asp Val Thr Asp His Tyr Glu Asp Val Arg Lys Ile Tyr Asp Asp
 1 5 10 15
 Phe Leu Lys Asn Ser Asn Met Leu Asp Leu Ile Asp Val Tyr Gln Lys
 20 25 30
 Cys Arg Ala Leu Thr Ser Asn Cys Glu Asn Tyr Asn Thr Val Ser Pro
 35 40 45
 Ser Gln Leu Leu Asp Phe Leu Ser Gly Lys Gln Tyr Ala Val Gly Asp
 50 55 60
 Glu Thr Asp Leu Ser Ile Pro Thr Ser Pro Thr Ser Lys Tyr Asn Arg
 65 70 75 80
 Asp Asn Glu Lys Val Gln Leu Leu Ala Arg Lys Ile Ile Phe Ser Tyr
 85 90 95
 Leu Asn Leu Leu Val Asn Ser Lys Asn Asp Leu Ala Val Ala Tyr Ile
 100 105 110
 Leu Asn Ile Pro Asp Arg Gly Leu Gly Arg Glu Ala Phe Thr Asp Leu
 115 120 125
 Lys His Ala Ala Arg Glu Lys Gln Met Ser Ile Phe Leu Val Ala Thr
 130 135 140
 Ser Phe Ile Arg Thr Ile Glu Leu Gly Gly Lys Gly Tyr Ala Pro Pro
 145 150 155 160
 Pro Ser Asp Pro Leu Arg Thr His Val Lys Gly Leu Ser Asn Phe Ile
 165 170 175
 Asn Phe Ile Asp Lys Leu Asp Glu Ile Leu Gly Glu Ile Pro Asn Pro
 180 185 190
 Ser Ile Ala Gly Gly Gln Ile Leu Ser Val Ile Lys Met Gln Leu Ile
 195 200 205
 Lys Gly Gln Asn Ser Arg Asp Pro Phe Cys Lys Ala Ile Glu Glu Val
 210 215 220
 Ala Gln Asp Leu Asp Leu Arg Ile Lys Asn Ile Ile Asn Ser Gln Glu
 225 230 235 240
 Gly Val Val Ala Leu Ser Thr Thr Asp Ile Ser Pro Ala Arg Pro Lys
 245 250 255
 Ser His Ala Ile Asn His Gly Thr Ala Tyr Cys Gly Arg Asp Thr Val
 260 265 270
 Lys Ala Leu Leu Val Leu Leu Asp Glu Glu Ala Ala Asn Ala Pro Thr
 275 280 285
 Lys Asn Lys Ala Glu Leu Leu Tyr Asp Glu Glu Asp Thr Ile His His
 290 295 300
 His Gly Thr Ser Ile Leu Thr Leu Phe Arg Ser Pro Thr Gln Val Asn
 305 310 315 320

Asn Leu Ile Lys Pro Leu Arg Glu Arg Ile Cys Val Ser Met Gln Glu
 325 330
 Lys Lys Ile Lys Met Lys Gln Thr Leu Ile Arg Ser Gln Phe Ala Cys
 340 345 350
 Thr Tyr Lys Asp Asp Tyr Met Ile Ser Lys Asp Asn Trp Asn Asn Val
 355 360 365
 Asn Leu Ala Ser Lys Pro Leu Cys Val Leu Tyr Met Glu Asn Asp Leu
 370 375 380
 Ser Glu Gly Val Asn Pro Ser Val Gly Arg Ser Thr Ile Gly Thr Ser
 385 390 395 400
 Phe Gly Asn Val His Leu Asp Arg Ser Lys Asn Glu Lys Val Ser Arg
 405 410 415
 Lys Ser Thr Ser Gln Thr Gly Asn Lys Ser Ser Lys Arg Lys Gln Val
 420 425 430
 Asp Leu Asp Gly Glu Asn Ile Leu Cys Asp Asn Arg Asn Glu Pro Pro
 435 440 445
 Gln His Lys Asn Ala Lys Ile Pro Lys Lys Ser Asn Asp Ser Gln Asn
 450 455 460
 Arg Leu Tyr Gly Lys Leu Ala Lys Val Ala Lys Ser Asn Lys Cys Thr
 465 470 475 480
 Ala Lys Asp Lys Leu Ile Ser Gly Gln Ala Lys Leu Thr Gln Phe Phe
 485 490 495
 Arg Leu

<210> 305
 <211> 172
 <212> PRT
 <213> Homo sapiens
 <400> 305

Met Arg Asp Ile Ala Ile Leu Lys Glu Lys Gln Glu Lys Glu Ile Gln
 1 5 10 15
 Thr Leu Gln Glu Thr Lys Lys Val Gln Ala Glu Thr Ala Ser Lys
 20 25 30
 Thr Arg Glu Val Gln Ala Gln Leu Gln Glu Lys Arg Leu Leu Glu
 35 40 45
 Lys Gln Leu Ser Glu Pro Asp Arg Arg Leu Leu Gly Lys Arg Lys Arg
 50 55 60
 Arg Glu Leu Asn Met Lys Ala Gln Ala Leu Lys Leu Ala Ala Lys Arg
 65 70 75 80
 Phe Ile Phe Glu Tyr Ser Cys Gly Ile Asn Arg Glu Asn Gln Gln Phe
 85 90 95
 Lys Lys Glu Leu Leu Gln Leu Ile Glu Gln Ala Gln Lys Leu Thr Ala
 100 105 110
 Thr Gln Ser His Leu Glu Asn Arg Lys Gln Gln Leu Gln Gln Glu Gln
 115 120 125
 Trp Tyr Leu Glu Ser Leu Ile Gln Ala Arg Gln Arg Leu Gln Gly Ser
 130 135 140
 His Asn Gln Cys Leu Asn Arg Gln Asp Val Pro Lys Thr Thr Pro Ser
 145 150 155 160
 Leu Pro Gln Gly Thr Lys Ser Arg Ile Asn Pro Lys
 165 170

<210> 306
 <211> 330
 <212> PRT
 <213> Homo sapiens
 <400> 306

Met Arg Arg Pro Ser Val Arg Ala Ala Gly Leu Val Leu Cys Thr Leu
 1 5 10 15
 Cys Tyr Leu Leu Val Gly Ala Ala Val Phe Asp Ala Leu Glu Ser Glu
 20 25 30
 Ala Glu Ser Gly Arg Gln Arg Leu Leu Val Gln Lys Arg Gly Ala Leu
 35 40 45
 Arg Arg Lys Phe Gly Phe Ser Ala Glu Asp Tyr Arg Glu Leu Glu Arg
 50 55 60
 Leu Ala Leu Gln Ala Glu Pro His Arg Ala Gly Arg Gln Trp Lys Phe
 65 70 75 80
 Pro Gly Ser Phe Tyr Phe Ala Ile Thr Val Ile Thr Thr Ile Gly Tyr

85 90 95
 Gly His Ala Ala Pro Gly Thr Asp Ser Gly Lys Val Phe Cys Met Phe
 100 105 110
 Tyr Ala Leu Leu Gly Ile Pro Leu Thr Leu Val Thr Phe Gln Ser Leu
 115 120 125
 Gly Glu Arg Leu Asn Ala Val Arg Arg Leu Leu Leu Ala Ala Lys
 130 135 140
 Cys Cys Leu Gly Leu Arg Trp Thr Cys Val Ser Thr Glu Asn Leu Val
 145 150 155 160
 Val Ala Gly Leu Leu Ala Cys Ala Ala Thr Leu Ala Leu Gly Ala Val
 165 170 175
 Ala Phe Ser His Phe Glu Gly Trp Thr Phe Phe His Ala Tyr Tyr Tyr
 180 185 190
 Cys Phe Ile Thr Leu Thr Thr Ile Gly Phe Gly Asp Phe Val Ala Leu
 195 200 205
 Gln Ser Gly Glu Ala Leu Gln Arg Lys Leu Pro Tyr Val Ala Phe Ser
 210 215 220
 Phe Leu Tyr Ile Leu Leu Gly Leu Thr Val Ile Gly Ala Phe Leu Asn
 225 230 235 240
 Leu Val Val Leu Arg Phe Leu Val Ala Ser Ala Asp Trp Pro Glu Arg
 245 250 255
 Ala Ala Arg Pro Pro Ser Pro Arg Pro Pro Gly Ala Pro Glu Ser Arg
 260 265 270
 Gly Leu Trp Leu Pro Arg Arg Pro Ala Arg Ser Val Gly Ser Ala Ser
 275 280 285
 Val Phe Cys His Val His Lys Leu Glu Arg Cys Ala Arg Asp Asn Leu
 290 295 300
 Gly Phe Ser Pro Pro Ser Ser Pro Gly Val Val Arg Gly Gly Gln Ala
 305 310 315 320
 Pro Arg Pro Gly Ala Arg Trp Lys Ser Ile
 325 330

<210> 307
 <211> 741
 <212> PRT
 <213> Homo sapiens
 <400> 307

Met Glu Ser Arg Asp His Asn Asn Pro Gln Glu Gly Pro Thr Ser Ser
 1 5 10 15
 Ser Gly Arg Arg Ala Ala Val Glu Asp Asn His Leu Leu Ile Lys Ala
 20 25 30
 Val Gln Asn Glu Asp Val Asp Leu Val Gln Gln Leu Leu Glu Gly Gly
 35 40 45
 Ala Asn Val Asn Phe Gln Glu Glu Glu Gly Gly Trp Thr Pro Leu His
 50 55 60
 Asn Ala Val Gln Met Ser Arg Glu Asp Ile Val Glu Leu Leu Leu Arg
 65 70 75 80
 His Gly Ala Asp Pro Val Leu Arg Lys Lys Asn Gly Ala Thr Pro Phe
 85 90 95
 Ile Leu Ala Ala Ile Ala Gly Ser Val Lys Leu Leu Lys Leu Phe Leu
 100 105 110
 Ser Lys Gly Ala Asp Val Asn Glu Cys Asp Phe Tyr Gly Phe Thr Ala
 115 120 125
 Phe Met Glu Ala Ala Val Tyr Gly Lys Val Lys Ala Leu Lys Phe Leu
 130 135 140
 Tyr Lys Arg Gly Ala Asn Val Asn Leu Arg Arg Lys Thr Lys Glu Asp
 145 150 155 160
 Gln Glu Arg Leu Arg Lys Gly Gly Ala Thr Ala Leu Met Asp Ala Ala
 165 170 175
 Glu Lys Gly His Val Glu Val Leu Lys Ile Leu Leu Asp Glu Met Gly
 180 185 190
 Ala Asp Val Asn Ala Cys Asp Asn Met Gly Arg Asn Ala Leu Ile His
 195 200 205
 Ala Leu Leu Ser Ser Asp Asp Ser Asp Val Glu Ala Ile Thr His Leu
 210 215 220
 Leu Leu Asp His Gly Ala Asp Val Asn Val Arg Gly Glu Arg Gly Lys
 225 230 235 240
 Thr Pro Leu Ile Leu Ala Val Glu Lys Lys His Leu Gly Leu Val Gln
 245 250 255

Arg Leu Leu Glu Gln Glu His Ile Glu Ile Asn Asp Thr Asp Ser Asp
 260 265 270
 Gly Lys Thr Ala Leu Leu Leu Ala Val Glu Leu Lys Leu Lys Lys Ile
 275 280 285
 Ala Glu Leu Leu Cys Lys Arg Gly Ala Ser Thr Asp Cys Gly Asp Leu
 290 295 300
 Val Met Thr Ala Arg Arg Asn Tyr Asp His Ser Leu Val Lys Val Leu
 305 310 315 320
 Leu Ser His Gly Ala Lys Glu Asp Phe His Pro Pro Ala Glu Asp Trp
 325 330 335
 Lys Pro Gln Ser Ser His Trp Gly Ala Ala Leu Lys Asp Leu His Arg
 340 345 350
 Ile Tyr Arg Pro Met Ile Gly Lys Leu Lys Phe Phe Ile Asp Glu Lys
 355 360 365
 Tyr Lys Ile Ala Asp Thr Ser Glu Gly Gly Ile Tyr Leu Gly Phe Tyr
 370 375 380
 Glu Lys Gln Glu Val Ala Val Lys Thr Phe Cys Glu Gly Ser Pro Arg
 385 390 395 400
 Ala Gln Arg Glu Val Ser Cys Leu Gln Ser Ser Arg Glu Asn Ser His
 405 410 415
 Leu Val Thr Phe Tyr Gly Ser Glu Ser His Arg Gly His Leu Phe Val
 420 425 430
 Cys Val Thr Leu Cys Glu Gln Thr Leu Glu Ala Cys Leu Asp Val His
 435 440 445
 Arg Gly Glu Asp Val Glu Asn Glu Glu Asp Glu Phe Ala Arg Asn Val
 450 455 460
 Leu Ser Ser Ile Phe Lys Ala Val Gln Glu Leu His Leu Ser Cys Gly
 465 470 475 480
 Tyr Thr His Gln Asp Leu Gln Pro Gln Asn Ile Leu Ile Asp Ser Lys
 485 490 495
 Lys Ala Ala His Leu Ala Asp Phe Asp Lys Ser Ile Lys Trp Ala Gly
 500 505 510
 Asp Pro Gln Glu Val Lys Arg Asp Leu Glu Asp Leu Gly Arg Leu Val
 515 520 525
 Leu Tyr Val Val Lys Lys Gly Ser Ile Ser Phe Glu Asp Leu Lys Ala
 530 535 540
 Gln Ser Asn Glu Glu Val Val Gln Leu Ser Pro Asp Glu Glu Thr Lys
 545 550 555 560
 Asp Leu Ile His Arg Leu Phe His Pro Gly Glu His Val Arg Asp Cys
 565 570 575
 Leu Ser Asp Leu Leu Gly His Pro Phe Phe Trp Thr Trp Glu Ser Arg
 580 585 590
 Tyr Arg Thr Leu Arg Asn Val Gly Asn Glu Ser Asp Ile Lys Thr Arg
 595 600 605
 Lys Ser Glu Ser Glu Ile Leu Arg Leu Leu Gln Pro Gly Pro Ser Glu
 610 615 620
 His Ser Lys Ser Phe Asp Lys Trp Thr Thr Lys Ile Asn Glu Cys Val
 625 630 635 640
 Met Lys Lys Met Asn Lys Phe Tyr Glu Lys Arg Gly Asn Phe Tyr Gln
 645 650 655
 Asn Thr Val Gly Asp Leu Leu Lys Phe Ile Arg Asn Leu Gly Glu His
 660 665 670
 Ile Asp Glu Glu Lys His Lys Lys Met Lys Leu Lys Ile Gly Asp Pro
 675 680 685
 Ser Leu Tyr Phe Gln Lys Thr Phe Pro Asp Leu Val Ile Tyr Val Tyr
 690 695 700
 Thr Lys Leu Gln Asn Thr Glu Tyr Arg Lys His Phe Pro Gln Thr His
 705 710 715 720
 Ser Pro Asn Lys Pro Gln Cys Asp Gly Ala Gly Gly Ala Ser Gly Leu
 725 730 735
 Ala Ser Pro Gly Cys
 740

<210> 308

<211> 651

<212> PRT

<213> Homo sapiens

<400> 308

Met Ser Gly Val Arg Ala Val Arg Ile Ser Ile Glu Ser Ala Cys Glu

1	Lys	Gln	Val	His	5	Glu	Val	Gly	Leu	Asp	10	Gly	Thr	Glu	Thr	Tyr	15	Leu	Pro
20	Pro	Leu	Ser	Met	20	Ser	Gln	Asn	Leu	Ala	25	Arg	Leu	Ala	Gln	Arg	30	Ile	Asp
35	Phe	Ser	Gln	Gly	35	Ser	Gly	Ser	40	Glu	Glu	Glu	Glu	Ala	Ala	Gly	45	Thr	Glu
50	Gly	Asp	Ala	Gln	50	Glu	Trp	Pro	55	Gly	Ala	Gly	Ser	Ser	Ala	Asp	60	Gln	Asp
65	Asp	Glu	Glu	Gly	65	Val	Val	Lys	70	Phe	Gln	Pro	Ser	Leu	Trp	Pro	75	Trp	Asp
80	Ser	Val	Arg	Asn	80	Asn	Leu	Arg	85	Ser	Ala	Leu	Thr	Glu	Met	Cys	90	Val	Leu
95	Tyr	Asp	Val	Leu	95	Ser	Ile	Val	100	Arg	Asp	Lys	Lys	Phe	Met	Thr	105	Leu	Asp
110	Pro	Val	Ser	Gln	110	Asp	Ala	Leu	115	Pro	Pro	Lys	Gln	Asn	Pro	Gln	120	Thr	Leu
125	Gln	Leu	Ile	Ser	125	Lys	Lys	Lys	130	Ser	Leu	Ala	Gly	Ala	Ala	Gln	135	Ile	Leu
140	Leu	Lys	Gly	Ala	140	Glu	Arg	Leu	145	Thr	Lys	Ser	Val	Thr	Glu	Asn	150	Gln	Glu
155	Asn	Lys	Leu	Gln	155	Arg	Asp	Phe	160	Asn	Ser	Glu	Leu	Leu	Arg	Leu	165	Arg	Gln
170	His	Trp	Lys	Leu	170	Arg	Lys	Val	175	Gly	Asp	Lys	Ile	Leu	Gly	Asp	180	Leu	Ser
185	Tyr	Arg	Ser	Ala	185	Gly	Ser	Leu	190	Phe	Pro	His	His	Gly	Thr	Phe	195	Glu	Val
200	Ile	Lys	Asn	Thr	200	Asp	Leu	Asp	205	Leu	Asp	Lys	Lys	Ile	Pro	Glu	210	Asp	Tyr
215	Cys	Pro	Leu	Asp	215	Val	Gln	Ile	220	Pro	Ser	Asp	Leu	Glu	Gly	Ser	225	Ala	Tyr
230	Ile	Lys	Val	Ser	230	Ile	Gln	Lys	235	Ala	Pro	Asp	Ile	Gly	Asp	Leu	240	Gly	Gly
245	Thr	Val	Asn	Leu	245	Phe	Lys	Arg	250	Pro	Leu	Pro	Lys	Ser	Lys	Pro	255	Gly	Ser
260	Pro	His	Trp	Gln	260	Thr	Lys	Leu	265	Glu	Ala	Ala	Gln	Asn	Val	Leu	270	Leu	Cys
275	Lys	Glu	Ile	Phe	275	Ala	Gln	Leu	280	Ser	Arg	Glu	Ala	Val	Gln	Ile	285	Lys	Ser
290	Gln	Val	Pro	His	290	Ile	Val	Val	295	Lys	Asn	Gln	Ile	Ile	Ser	Gln	300	Pro	Phe
305	Pro	Ser	Leu	Gln	305	Leu	Ser	Ile	310	Ser	Leu	Cys	His	Ser	Ser	Asn	315	Asp	Lys
320	Lys	Ser	Gln	Lys	320	Phe	Ala	Thr	325	Glu	Lys	Gln	Cys	Pro	Glu	Asp	330	His	Leu
335	Tyr	Val	Leu	Glu	335	His	Asn	Leu	340	His	Leu	Leu	Ile	Arg	Glu	Phe	345	His	Lys
345	Gln	Thr	Leu	Ser	345	Ser	Ile	Met	350	Met	Pro	His	Pro	Ala	Ser	Ala	355	Pro	Phe
360	Gly	His	Lys	Arg	360	Met	Arg	Leu	365	Ser	Gly	Pro	Gln	Ala	Phe	Asp	370	Lys	Asn
375	Glu	Ile	Asn	Ser	375	Gln	Ser	Ser	380	Glu	Gly	Leu	Leu	Glu	Lys	Ile	385	Ile	Ile
385	Lys	Gln	Ala	Lys	385	His	Ile	Phe	390	Leu	Arg	Ser	Arg	Ala	Ala	Thr	395	Thr	Ile
395	Asp	Ser	Leu	Ala	395	Ser	Arg	Ile	400	Glu	Asp	Pro	Gln	Ile	Gln	Ala	405	His	Trp
405	Ser	Asn	Ile	Asn	405	Asp	Val	Tyr	410	Glu	Ser	Ser	Val	Lys	Val	Leu	415	Ile	Thr
415	Ser	Gln	Gly	Tyr	415														

Glu Ser Ile Gly Asn Ala Ser Ala Ile Thr Val Ala Ser Pro Ser Gly
 565 570 575
 Asp Tyr Ala Ile Ser Val Arg Asn Gly Pro Glu Ser Gly Ser Lys Ile
 580 585 590
 Met Val Gln Phe Pro Arg Asn Gln Cys Lys Asp Leu Pro Lys Ser Asp
 595 600 605
 Val Leu Gln Asp Asn Lys Trp Ser His Leu Arg Gly Pro Phe Lys Glu
 610 615 620
 Val Gln Trp Asn Lys Met Glu Gly Arg Asn Phe Val Tyr Lys Met Glu
 625 630 635 640
 Leu Leu Met Ser Ala Leu Ser Pro Cys Leu Leu
 645 650

<210> 309
 <211> 1496
 <212> PRT
 <213> Homo sapiens
 <400> 309

Met Met Ala Asn Trp Ala Glu Ala Arg Pro Leu Leu Ile Leu Ile Val
 1 5 10 15
 Leu Leu Gly Gln Phe Val Ser Ile Lys Ala Gln Glu Glu Asp Glu Asp
 20 25 30
 Glu Gly Tyr Gly Glu Glu Ile Ala Cys Thr Gln Asn Gly Gln Met Tyr
 35 40 45
 Leu Asn Arg Asp Ile Trp Lys Pro Ala Pro Cys Gln Ile Cys Val Cys
 50 55 60
 Asp Asn Gly Ala Ile Leu Cys Asp Lys Ile Glu Cys Gln Asp Val Leu
 65 70 75 80
 Asp Cys Ala Asp Pro Val Thr Pro Pro Gly Glu Cys Cys Pro Val Cys
 85 90 95
 Ser Gln Thr Pro Gly Gly Gly Asn Thr Asn Phe Gly Arg Gly Arg Lys
 100 105 110
 Gly Gln Lys Gly Glu Pro Gly Leu Val Pro Val Val Thr Gly Ile Arg
 115 120 125
 Gly Arg Pro Gly Pro Ala Gly Pro Pro Gly Ser Gln Gly Pro Arg Gly
 130 135 140
 Glu Arg Gly Pro Lys Gly Arg Pro Gly Pro Arg Gly Pro Gln Gly Ile
 145 150 155 160
 Asp Gly Glu Pro Gly Val Pro Gly Gln Pro Gly Ala Pro Gly Pro Pro
 165 170 175
 Gly His Pro Ser His Pro Gly Pro Asp Gly Leu Ser Arg Pro Phe Ser
 180 185 190
 Ala Gln Met Ala Gly Leu Asp Glu Lys Ser Gly Leu Gly Ser Gln Val
 195 200 205
 Gly Leu Met Pro Gly Ser Val Gly Pro Val Gly Pro Arg Gly Pro Gln
 210 215 220
 Gly Leu Gln Gly Gln Gln Gly Gly Ala Gly Pro Thr Gly Pro Pro Gly
 225 230 235 240
 Glu Pro Gly Asp Pro Gly Pro Met Gly Pro Ile Gly Ser Arg Gly Pro
 245 250 255
 Glu Gly Pro Pro Gly Lys Pro Gly Glu Asp Gly Glu Pro Gly Arg Asn
 260 265 270
 Gly Asn Pro Gly Glu Val Gly Phe Ala Gly Ser Pro Gly Ala Arg Gly
 275 280 285
 Phe Pro Gly Ala Pro Gly Leu Pro Gly Leu Lys Gly His Arg Gly His
 290 295 300
 Lys Gly Leu Glu Gly Pro Lys Gly Glu Val Gly Ala Pro Gly Ser Lys
 305 310 315 320
 Gly Glu Ala Gly Pro Thr Gly Pro Met Gly Ala Met Gly Pro Leu Gly
 325 330 335
 Pro Arg Gly Met Pro Gly Glu Arg Gly Arg Leu Gly Pro Gln Gly Ala
 340 345 350
 Pro Gly Gln Arg Gly Ala His Gly Met Pro Gly Lys Pro Gly Pro Met
 355 360 365
 Gly Pro Leu Gly Ile Pro Gly Ser Ser Gly Phe Pro Gly Asn Pro Gly
 370 375 380
 Met Lys Gly Glu Ala Gly Pro Thr Gly Ala Arg Gly Pro Glu Gly Pro
 385 390 395 400
 Gln Gly Gln Arg Gly Glu Thr Gly Pro Pro Gly Pro Val Gly Ser Pro

405
 Gly Leu Pro Gly Ala Ile Gly Thr Asp Gly Thr Pro Gly Pro Lys Gly
 420
 Pro Thr Gly Ser Pro Gly Thr Ser Gly Pro Pro Gly Ser Ala Gly Pro
 435
 Pro Gly Ser Pro Gly Pro Gln Gly Ser Thr Gly Pro Gln Gly Asn Ser
 450
 Gly Leu Pro Gly Asp Pro Gly Phe Lys Gly Glu Ala Gly Pro Lys Gly
 465
 Glu Pro Gly Pro His Gly Ile Gln Gly Pro Ile Gly Pro Pro Gly Glu
 485
 Glu Gly Lys Arg Gly Pro Arg Gly Asp Pro Gly Thr Leu Gly Pro Pro
 500
 Gly Pro Val Gly Glu Arg Gly Ala Pro Gly Asn Arg Gly Phe Pro Gly
 515
 Ser Asp Gly Leu Pro Gly Pro Lys Gly Ala Gln Gly Glu Arg Gly Pro
 530
 Val Gly Ser Ser Gly Pro Lys Gly Ser Gln Gly Asp Pro Gly Arg Pro
 545
 Gly Glu Pro Gly Leu Pro Gly Ala Arg Gly Leu Thr Gly Asn Pro Gly
 565
 Val Gln Gly Pro Glu Gly Lys Leu Gly Pro Leu Gly Ala Pro Gly Glu
 580
 Asp Gly Arg Pro Gly Pro Pro Gly Ser Ile Gly Ile Lys Gly Gln Pro
 595
 Gly Thr Met Gly Leu Pro Gly Pro Lys Gly Ser Asn Gly Asp Pro Gly
 610
 Lys Pro Gly Glu Ala Gly Asn Pro Gly Val Pro Gly Gln Arg Gly Ala
 625
 Pro Gly Lys Asp Gly Lys Val Gly Pro Tyr Gly Pro Pro Gly Pro Pro
 645
 Gly Leu Arg Gly Glu Arg Gly Glu Gln Gly Pro Pro Gly Pro Thr Gly
 660
 Phe Gln Gly His Pro Gly Pro Pro Gly Pro Pro Gly Glu Gly Gly Lys
 675
 Pro Gly Asp Gln Gly Val Pro Gly Gly Pro Gly Ala Val Gly Pro Leu
 690
 Gly Pro Arg Gly Glu Arg Gly Asn Pro Gly Glu Arg Gly Glu Pro Gly
 705
 Ile Thr Gly Leu Pro Gly Glu Lys Gly Met Ala Gly Gly His Gly Pro
 725
 Asp Gly Pro Lys Gly Ser Pro Gly Pro Ser Gly Thr Pro Gly Asp Thr
 740
 Gly Pro Pro Gly Leu Gln Gly Met Pro Gly Glu Arg Gly Ile Ala Gly
 755
 Thr Pro Gly Pro Lys Gly Asp Arg Gly Gly Ile Gly Glu Lys Gly Ala
 770
 Glu Gly Thr Ala Gly Asn Asp Gly Ala Gly Gly Leu Pro Gly Pro Leu
 785
 Gly Pro Pro Gly Pro Ala Gly Leu Leu Gly Glu Lys Gly Glu Pro Gly
 805
 Pro Arg Gly Leu Val Gly Pro Pro Gly Ser Arg Gly Asn Pro Gly Ser
 820
 Arg Gly Glu Asn Gly Pro Thr Gly Ala Val Gly Phe Ala Gly Pro Gln
 835
 Gly Ser Asp Gly Gln Pro Gly Val Lys Gly Glu Pro Gly Glu Pro Gly
 850
 Gln Lys Gly Asp Ala Gly Ser Pro Gly Pro Gln Gly Leu Ala Gly Ser
 865
 Pro Gly Pro His Gly Pro Asn Gly Val Pro Gly Leu Lys Gly Gly Arg
 885
 Gly Thr Gln Gly Pro Pro Gly Ala Thr Gly Phe Pro Gly Ser Ala Gly
 900
 Arg Val Gly Pro Pro Gly Pro Ala Gly Ala Pro Gly Pro Ala Gly Pro
 915
 Leu Gly Glu Pro Gly Lys Glu Gly Pro Pro Gly Pro Arg Gly Asp Pro
 930
 Gly Ser His Gly Arg Val Gly Val Arg Gly Pro Ala Gly Pro Pro Gly
 945
 950
 955
 960

Gly Pro Gly Asp Lys Gly Asp Pro Gly Glu Asp Gly Gln Pro Gly Pro
 965 970 975
 Asp Gly Pro Pro Gly Pro Ala Gly Thr Thr Gly Gln Arg Gly Ile Val
 980 985 990
 Gly Met Pro Gly Gln Arg Gly Glu Arg Gly Met Pro Gly Leu Pro Gly
 995 1000 1005
 Pro Ala Gly Thr Pro Gly Lys Val Gly Pro Thr Gly Ala Thr Gly
 1010 1015 1020
 Asp Lys Gly Pro Pro Gly Pro Val Gly Pro Pro Gly Ser Asn Gly
 1025 1030 1035
 Pro Val Gly Glu Pro Gly Pro Glu Gly Pro Ala Gly Asn Asp Gly
 1040 1045 1050
 Thr Pro Gly Arg Asp Gly Ala Val Gly Glu Arg Gly Asp Arg Gly
 1055 1060 1065
 Asp Pro Gly Pro Ala Gly Leu Pro Gly Ser Gln Gly Ala Pro Gly
 1070 1075 1080
 Thr Pro Gly Pro Val Gly Ala Pro Gly Asp Ala Gly Gln Arg Gly
 1085 1090 1095
 Asp Pro Gly Ser Arg Gly Pro Ile Gly His Leu Gly Arg Ala Gly
 1100 1105 1110
 Lys Arg Gly Leu Pro Gly Pro Gln Gly Pro Arg Gly Asp Lys Gly
 1115 1120 1125
 Asp His Gly Asp Arg Gly Asp Arg Gly Gln Lys Gly His Arg Gly
 1130 1135 1140
 Phe Thr Gly Leu Gln Gly Leu Pro Gly Pro Pro Gly Pro Asn Gly
 1145 1150 1155
 Glu Gln Gly Ser Ala Gly Ile Pro Gly Pro Phe Gly Pro Arg Gly
 1160 1165 1170
 Pro Pro Gly Pro Val Gly Pro Ser Gly Lys Glu Gly Asn Pro Gly
 1175 1180 1185
 Pro Leu Gly Pro Leu Gly Pro Pro Gly Val Arg Gly Ser Val Gly
 1190 1195 1200
 Glu Ala Gly Pro Glu Gly Pro Pro Gly Glu Pro Gly Pro Pro Gly
 1205 1210 1215
 Pro Pro Gly Pro Pro Gly His Leu Thr Ala Ala Leu Gly Asp Ile
 1220 1225 1230
 Met Gly His Tyr Asp Glu Ser Met Pro Asp Pro Leu Pro Glu Phe
 1235 1240 1245
 Thr Glu Asp Gln Ala Ala Pro Asp Asp Lys Asn Lys Thr Asp Pro
 1250 1255 1260
 Gly Val His Ala Thr Leu Lys Ser Leu Ser Ser Gln Ile Glu Thr
 1265 1270 1275
 Met Arg Ser Pro Asp Gly Ser Lys Lys His Pro Ala Arg Thr Cys
 1280 1285 1290
 Asp Asp Leu Lys Leu Cys His Ser Ala Lys Gln Ser Gly Glu Tyr
 1295 1300 1305
 Trp Ile Asp Pro Asn Gln Gly Ser Val Glu Asp Ala Ile Lys Val
 1310 1315 1320
 Tyr Cys Asn Met Glu Thr Gly Glu Thr Cys Ile Ser Ala Asn Pro
 1325 1330 1335
 Ser Ser Val Pro Arg Lys Thr Trp Trp Ala Ser Lys Ser Pro Asp
 1340 1345 1350
 Asn Lys Pro Val Trp Tyr Gly Leu Asp Met Asn Arg Gly Ser Gln
 1355 1360 1365
 Phe Ala Tyr Gly Asp His Gln Ser Pro Asn Thr Ala Ile Thr Gln
 1370 1375 1380
 Met Thr Phe Leu Arg Leu Leu Ser Lys Glu Ala Ser Gln Asn Ile
 1385 1390 1395
 Thr Tyr Ile Cys Lys Asn Ser Val Gly Tyr Met Asp Asp Gln Ala
 1400 1405 1410
 Lys Asn Leu Lys Lys Ala Val Val Leu Lys Gly Ala Asn Asp Leu
 1415 1420 1425
 Asp Ile Lys Ala Glu Gly Asn Ile Arg Phe Arg Tyr Ile Val Leu
 1430 1435 1440
 Gln Asp Thr Cys Ser Lys Arg Asn Gly Asn Val Gly Lys Thr Val
 1445 1450 1455
 Phe Glu Tyr Arg Thr Gln Asn Val Ala Arg Leu Pro Ile Ile Asp
 1460 1465 1470
 Leu Ala Pro Val Asp Val Gly Gly Thr Asp Gln Glu Phe Gly Val

1475
Glu Ile Gly Pro Val Cys Phe Val
1490

1480
Phe Val
1495

1485

<210> 310
<211> 52
<212> PRT
<213> Homo sapiens
<400> 310

Met Lys Arg Lys Thr Lys Thr Pro Ser Glu Gly Gly Gln Val Leu Ala
1 5 10 15
Glu Gln Arg Gly Ser Arg Ser Cys Gln Arg Leu Thr Ala Arg Lys Ala
20 25 30
Leu Pro Ile Leu Val Phe Thr Ile Glu Thr Ala Thr Ala Cys Thr Asp
35 40 45
His Phe Gly Ser
50

<210> 311
<211> 330
<212> PRT
<213> Homo sapiens
<400> 311

Met Ala Glu Glu Asp Leu Ala Pro Gly Lys Ser Ser Val Ala Val Asn
1 5 10 15
Asn Cys Ile Arg Gln Leu Ser Tyr Cys Lys Asn Asp Ile Arg Asp Thr
20 25 30
Val Gly Ile Trp Gly Glu Gly Lys Asp Met Tyr Leu Ile Leu Glu Asn
35 40 45
Asp Met Leu Ser Leu Val Asp Pro Met Asp Arg Ser Val Leu His Ser
50 55 60
Gln Pro Ile Val Ser Ile Arg Val Trp Gly Val Gly Arg Asp Asn Gly
65 70 75 80
Arg Asp Phe Ala Tyr Val Ala Arg Asp Lys Asp Thr Arg Ile Leu Lys
85 90 95
Cys His Val Phe Arg Cys Asp Thr Pro Ala Lys Ala Ile Ala Thr Ser
100 105 110
Leu His Glu Ile Cys Ser Lys Ile Met Ala Glu Arg Lys Asn Ala Lys
115 120 125
Ala Leu Ala Cys Ser Ser Leu Gln Glu Arg Ala Asn Val Asn Leu Asp
130 135 140
Val Pro Leu Gln Val Asp Phe Pro Thr Pro Lys Thr Glu Leu Val Gln
145 150 155 160
Lys Phe His Val Gln Tyr Leu Gly Met Leu Pro Val Asp Lys Pro Val
165 170 175
Gly Met Asp Ile Leu Asn Ser Ala Ile Glu Asn Leu Met Thr Ser Ser
180 185 190
Asn Lys Glu Asp Trp Leu Ser Val Asn Met Asn Val Ala Asp Ala Thr
195 200 205
Val Thr Val Ile Ser Glu Lys Asn Glu Glu Glu Val Leu Val Glu Cys
210 215 220
Arg Val Arg Phe Leu Ser Phe Met Gly Val Gly Lys Asp Val His Thr
225 230 235 240
Phe Ala Phe Ile Met Asp Thr Gly Asn Gln Arg Phe Glu Cys His Val
245 250 255
Phe Trp Cys Glu Pro Asn Ala Gly Asn Val Ser Glu Ala Val Gln Ala
260 265 270
Ala Cys Met Leu Arg Tyr Gln Lys Cys Leu Val Ala Arg Pro Pro Ser
275 280 285
Gln Lys Val Arg Pro Pro Pro Pro Ala Asp Ser Val Thr Arg Arg
290 295 300
Val Thr Thr Asn Val Lys Arg Gly Val Leu Ser Leu Ile Asp Thr Leu
305 310 315 320
Lys Gln Lys Arg Pro Val Thr Glu Met Pro
325 330

<210> 312
<211> 115
<212> PRT

<213> Homo sapiens

<400> 312

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Met Ser Arg His Ser Arg Leu Gln Arg Gln Val Leu Ser Leu Tyr Arg
1      5      10
Asp Leu Leu Arg Ala Gly Arg Gly Lys Pro Gly Ala Glu Ala Arg Val
20      25      30
Arg Ala Glu Phe Arg Gln His Ala Gly Leu Pro Arg Ser Asp Val Leu
35      40      45
Arg Ile Glu Tyr Leu Tyr Arg Arg Gly Arg Arg Gln Leu Gln Leu Leu
50      55      60
Arg Ser Gly His Ala Thr Ala Met Gly Ala Phe Val Arg Pro Arg Ala
65      70      75
Pro Thr Gly Glu Pro Gly Gly Val Gly Cys Gln Pro Asp Asp Gly Asp
85      90      95
Ser Pro Arg Asn Pro His Asp Ser Thr Gly Ala Pro Glu Thr Arg Pro
100     105     110
Asp Gly Arg
115

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<210> 313

<211> 321

<212> PRT

<213> Homo sapiens

<400> 313

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Met Lys Glu Asp Cys Leu Pro Ser Ser His Val Pro Ile Ser Asp Ser
1      5      10
Lys Ser Ile Gln Lys Ser Glu Leu Leu Gly Leu Leu Lys Thr Tyr Asn
20      25      30
Cys Tyr His Glu Gly Lys Ser Phe Gln Leu Arg His Arg Glu Glu Glu
35      40      45
Gly Thr Leu Ile Ile Glu Gly Leu Leu Asn Ile Ala Trp Gly Leu Arg
50      55      60
Arg Pro Ile Arg Leu Gln Met Gln Asp Asp Arg Glu Gln Val His Leu
65      70      75
Pro Ser Thr Ser Trp Met Pro Arg Arg Pro Ser Cys Pro Leu Lys Glu
85      90      95
Pro Ser Pro Gln Asn Gly Asn Ile Thr Ala Gln Gly Pro Ser Ile Gln
100     105     110
Pro Val His Lys Ala Glu Ser Ser Thr Asp Ser Ser Gly Pro Leu Glu
115     120     125
Glu Ala Glu Glu Ala Pro Gln Leu Met Arg Thr Lys Ser Asp Ala Ser
130     135     140
Cys Met Ser Gln Arg Arg Pro Lys Cys Arg Ala Pro Gly Glu Ala Gln
145     150     155
Arg Ile Arg Arg His Arg Phe Ser Ile Asn Gly His Phe Tyr Asn His
165     170     175
Lys Thr Ser Val Phe Thr Pro Ala Tyr Gly Ser Val Thr Asn Val Arg
180     185     190
Val Asn Ser Thr Met Thr Thr Leu Gln Val Leu Thr Leu Leu Leu Asn
195     200     205
Lys Phe Arg Val Glu Asp Gly Pro Ser Glu Phe Ala Leu Tyr Ile Val
210     215     220
His Glu Ser Gly Glu Arg Thr Lys Leu Lys Asp Cys Glu Tyr Pro Leu
225     230     235
Ile Ser Arg Ile Leu His Gly Pro Cys Glu Lys Ile Ala Arg Ile Phe
245     250     255
Leu Met Glu Ala Asp Leu Gly Val Glu Val Pro His Glu Val Ala Gln
260     265     270
Tyr Ile Lys Phe Glu Met Pro Val Leu Asp Ser Phe Val Glu Lys Leu
275     280     285
Lys Glu Glu Glu Glu Arg Glu Ile Ile Lys Leu Thr Met Lys Phe Gln
290     295     300
Ala Leu Arg Leu Thr Met Leu Gln Arg Leu Glu Gln Leu Val Glu Ala
305     310     315
Lys
320

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<210> 314

<211> 490

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<212>  PRT
<213>  Homo sapiens
<400>  314
Met Trp Pro Gln Asp Pro Ser Arg Lys Glu Val Leu Arg Phe Ala Val
1      5      10      15
Ser Cys Arg Ile Leu Thr Leu Met Leu Gln Ala Leu Phe Asn Ala Ile
20     25     30
Ile Pro Asp His His Ala Glu Ala Phe Ser Pro Pro Arg Leu Ala Pro
35     40     45
Ser Gly Phe Val Asp Gln Leu Val Glu Gly Leu Leu Gly Gly Leu Ser
50     55     60
His Trp Asp Ala Glu His Phe Leu Phe Ile Ala Glu His Gly Tyr Leu
65     70     75     80
Tyr Glu His Asn Phe Ala Phe Phe Pro Gly Phe Pro Leu Ala Leu Leu
85     90     95
Val Gly Thr Glu Leu Leu Arg Pro Leu Arg Gly Leu Leu Ser Leu Arg
100    105    110
Ser Cys Leu Leu Ile Ser Val Ala Ser Leu Asn Phe Leu Phe Phe Met
115    120    125
Leu Ala Ala Val Ala Leu His Asp Leu Gly Cys Leu Val Leu His Cys
130    135    140
Pro His Gln Ser Phe Tyr Ala Ala Leu Leu Phe Cys Leu Ser Pro Ala
145    150    155    160
Asn Val Phe Leu Ala Ala Gly Tyr Ser Glu Ala Leu Phe Ala Leu Leu
165    170    175
Thr Phe Ser Ala Met Gly Gln Leu Glu Arg Gly Arg Val Trp Thr Ser
180    185    190
Val Leu Leu Phe Ala Phe Ala Thr Gly Val Arg Ser Asn Gly Leu Val
195    200    205
Ser Val Gly Phe Leu Met His Ser Gln Cys Gln Gly Phe Phe Ser Ser
210    215    220
Leu Thr Met Leu Asn Pro Leu Arg Gln Leu Phe Lys Leu Met Ala Ser
225    230    235    240
Leu Phe Leu Ser Val Phe Thr Leu Gly Leu Pro Phe Ala Leu Phe Gln
245    250    255
Tyr Tyr Ala Tyr Thr Gln Phe Cys Leu Pro Gly Ser Ala Arg Pro Ile
260    265    270
Pro Glu Pro Leu Val Gln Leu Ala Val Asp Lys Gly Tyr Arg Ile Ala
275    280    285
Glu Gly Asn Glu Pro Pro Trp Cys Phe Trp Asp Val Pro Leu Ile Tyr
290    295    300
Ser Tyr Ile Gln Asp Val Tyr Trp Asn Val Gly Phe Leu Lys Tyr Tyr
305    310    315    320
Glu Leu Lys Gln Val Pro Asn Phe Leu Leu Ala Ala Pro Val Ala Ile
325    330    335
Leu Val Ala Trp Ala Thr Trp Thr Tyr Val Thr Thr His Pro Trp Leu
340    345    350
Cys Leu Thr Leu Gly Leu Gln Arg Ser Lys Asn Asn Lys Thr Leu Glu
355    360    365
Lys Pro Asp Leu Gly Phe Leu Ser Pro Gln Val Phe Val Tyr Val Val
370    375    380
His Ala Ala Val Leu Leu Leu Phe Gly Gly Leu Cys Met His Val Gln
385    390    395    400
Val Leu Thr Arg Phe Leu Gly Ser Ser Thr Pro Ile Met Tyr Trp Phe
405    410    415
Pro Ala His Leu Leu Gln Asp Gln Glu Pro Leu Leu Arg Ser Leu Lys
420    425    430
Thr Val Pro Trp Lys Pro Leu Ala Glu Asp Ser Pro Pro Gly Gln Lys
435    440    445
Val Pro Arg Asn Pro Ile Met Gly Leu Leu Tyr His Trp Lys Thr Cys
450    455    460
Ser Pro Val Thr Arg Tyr Ile Leu Gly Tyr Phe Leu Thr Tyr Trp Leu
465    470    475    480
Leu Gly Leu Leu Leu His Cys Asn Phe Leu
485    490

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<210> 315
<211> 688
<212> PRT

<213> Homo sapiens
 <400> 315
 Met Ser Ser Arg Thr Val Leu Ala Pro Gly Asn Asp Arg Asn Ser Asp
 1 5 10 15
 Thr His Gly Thr Leu Gly Ser Gly Arg Ser Ser Asp Lys Gly Pro Ser
 20 25 30
 Trp Ser Ser Arg Ser Leu Gly Ala Arg Cys Arg Asn Ser Ile Ala Ser
 35 40 45
 Cys Pro Glu Glu Gln Pro His Val Gly Asn Tyr Arg Leu Leu Arg Thr
 50 55 60
 Ile Gly Lys Gly Asn Phe Ala Lys Val Lys Leu Ala Arg His Ile Leu
 65 70 75 80
 Thr Gly Arg Glu Val Ala Ile Lys Ile Ile Asp Lys Thr Gln Leu Asn
 85 90 95
 Pro Ser Ser Leu Gln Lys Leu Phe Arg Glu Val Arg Ile Met Lys Gly
 100 105 110
 Leu Asn His Pro Asn Ile Val Lys Leu Phe Glu Val Ile Glu Thr Glu
 115 120 125
 Lys Thr Leu Tyr Leu Val Met Glu Tyr Ala Ser Ala Gly Glu Val Phe
 130 135 140
 Asp Tyr Leu Val Ser His Gly Arg Met Lys Glu Lys Glu Ala Arg Ala
 145 150 155 160
 Lys Phe Arg Gln Ile Val Ser Ala Val His Tyr Cys His Gln Lys Asn
 165 170 175
 Ile Val His Arg Asp Leu Lys Ala Glu Asn Leu Leu Leu Asp Ala Glu
 180 185 190
 Ala Asn Ile Lys Ile Ala Asp Phe Gly Phe Ser Asn Glu Phe Thr Leu
 195 200 205
 Gly Ser Lys Leu Asp Thr Phe Cys Gly Ser Pro Pro Tyr Ala Ala Pro
 210 215 220
 Glu Leu Phe Gln Gly Lys Lys Tyr Asp Gly Pro Glu Val Asp Ile Trp
 225 230 235 240
 Ser Leu Gly Val Ile Leu Tyr Thr Leu Val Ser Gly Ser Leu Pro Phe
 245 250 255
 Asp Gly His Asn Leu Lys Glu Leu Arg Glu Arg Val Leu Arg Gly Lys
 260 265 270
 Tyr Arg Val Pro Phe Tyr Met Ser Thr Asp Cys Glu Ser Ile Leu Arg
 275 280 285
 Arg Phe Leu Val Leu Asn Pro Ala Lys Arg Cys Thr Leu Glu Gln Ile
 290 295 300
 Met Lys Asp Lys Trp Ile Asn Ile Gly Tyr Glu Gly Glu Glu Leu Lys
 305 310 315 320
 Pro Tyr Thr Glu Pro Glu Glu Asp Phe Gly Asp Thr Lys Arg Ile Glu
 325 330 335
 Val Met Val Gly Met Gly Tyr Thr Arg Glu Glu Ile Lys Glu Ser Leu
 340 345 350
 Thr Ser Gln Lys Tyr Asn Glu Val Thr Ala Thr Tyr Leu Leu Leu Gly
 355 360 365
 Arg Lys Thr Glu Glu Gly Gly Asp Arg Gly Ala Pro Gly Leu Ala Leu
 370 375 380
 Ala Arg Val Arg Ala Pro Ser Asp Thr Thr Asn Gly Thr Ser Ser Ser
 385 390 395 400
 Lys Gly Thr Ser His Ser Lys Gly Gln Arg Ser Ser Ser Ser Thr Tyr
 405 410 415
 His Arg Gln Arg Arg His Ser Asp Phe Cys Gly Pro Ser Pro Ala Pro
 420 425 430
 Leu His Pro Lys Arg Ser Pro Thr Ser Thr Gly Glu Ala Glu Leu Lys
 435 440 445
 Glu Glu Arg Leu Pro Gly Arg Lys Ala Ser Cys Ser Thr Ala Gly Ser
 450 455 460
 Gly Ser Arg Gly Leu Pro Pro Ser Ser Pro Met Val Ser Ser Ala His
 465 470 475 480
 Asn Pro Asn Lys Ala Glu Ile Pro Glu Arg Arg Lys Asp Ser Thr Ser
 485 490 495
 Thr Pro Asn Asn Leu Pro Pro Ser Met Met Thr Arg Arg Asn Thr Tyr
 500 505 510
 Val Cys Thr Glu Arg Pro Gly Ala Glu Arg Pro Ser Leu Leu Pro Asn
 515 520 525
 Gly Lys Glu Asn Ser Ser Gly Thr Pro Arg Val Pro Pro Ala Ser Pro

530
 Ser Ser His Ser Leu Ala Pro Pro Ser Gly Glu Arg Ser Arg Leu Ala
 545 550 555 560
 Arg Gly Ser Thr Ile Arg Ser Thr Phe His Gly Gly Gln Val Arg Asp
 565 570 575
 Arg Arg Ala Gly Gly Gly Gly Gly Gly Val Gln Asn Gly Pro Pro
 580 585 590
 Ala Ser Pro Thr Leu Ala His Glu Ala Ala Pro Leu Pro Ala Gly Arg
 595 600 605
 Pro Arg Pro Thr Thr Asn Leu Phe Thr Lys Leu Thr Ser Lys Leu Thr
 610 615 620
 Arg Arg Val Thr Leu Asp Pro Ser Lys Arg Gln Asn Ser Asn Arg Cys
 625 630 635 640
 Val Ser Gly Ala Ser Leu Pro Gln Gly Ser Lys Ile Arg Ser Gln Thr
 645 650 655
 Asn Leu Arg Glu Ser Gly Asp Leu Arg Ser Gln Val Ala Ile Tyr Leu
 660 665 670
 Gly Ile Lys Arg Lys Pro Pro Pro Gly Cys Ser Asp Ser Pro Gly Val
 675 680 685

<210> 316
 <211> 338
 <212> PRT
 <213> Homo sapiens
 <400> 316

Met Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr
 1 5 10 15
 Ser Gly Gln Tyr Tyr Asp Tyr Asp Phe Pro Leu Ser Ile Tyr Gly Gln
 20 25 30
 Ser Ser Pro Asn Cys Ala Pro Glu Cys Asn Cys Pro Glu Ser Tyr Pro
 35 40 45
 Ser Ala Met Tyr Cys Asp Glu Leu Lys Leu Lys Ser Val Pro Met Val
 50 55 60
 Pro Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Asn Gln Ile Asp His
 65 70 75 80
 Ile Asp Glu Lys Ala Phe Glu Asn Val Thr Asp Leu Gln Trp Leu Ile
 85 90 95
 Leu Asp His Asn Leu Leu Glu Asn Ser Lys Ile Lys Gly Arg Val Phe
 100 105 110
 Ser Lys Leu Lys Gln Leu Lys Lys Leu His Ile Asn His Asn Asn Leu
 115 120 125
 Thr Glu Ser Val Gly Pro Leu Pro Lys Ser Leu Glu Asp Leu Gln Leu
 130 135 140
 Thr His Asn Lys Ile Thr Lys Leu Gly Ser Phe Glu Gly Leu Val Asn
 145 150 155 160
 Leu Thr Phe Ile His Leu Gln His Asn Arg Leu Lys Glu Asp Ala Val
 165 170 175
 Ser Ala Ala Phe Lys Gly Leu Lys Ser Leu Glu Tyr Leu Asp Leu Ser
 180 185 190
 Phe Asn Gln Ile Ala Arg Leu Pro Ser Gly Leu Pro Val Ser Leu Leu
 195 200 205
 Thr Leu Tyr Leu Asp Asn Asn Lys Ile Ser Asn Ile Pro Asp Glu Tyr
 210 215 220
 Phe Lys Arg Phe Asn Ala Leu Gln Tyr Leu Arg Leu Ser His Asn Glu
 225 230 235 240
 Leu Ala Asp Ser Gly Ile Pro Gly Asn Ser Phe Asn Val Ser Ser Leu
 245 250 255
 Val Glu Leu Asp Leu Ser Tyr Asn Lys Leu Lys Asn Ile Pro Thr Val
 260 265 270
 Asn Glu Asn Leu Glu Asn Tyr Tyr Leu Glu Val Asn Gln Leu Glu Lys
 275 280 285
 Phe Asp Ile Lys Ser Phe Cys Lys Ile Leu Gly Pro Leu Ser Tyr Ser
 290 295 300
 Lys Ile Lys His Leu Arg Leu Asp Gly Asn Arg Ile Ser Glu Thr Ser
 305 310 315 320
 Leu Pro Pro Asp Met Tyr Glu Cys Leu Arg Val Ala Asn Glu Val Thr
 325 330 335
 Leu Asn

<210> 317
 <211> 1466
 <212> PRT
 <213> Homo sapiens
 <400> 317

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Met Met Ser Phe Val Gln Lys Gly Ser Trp Leu Leu Leu Ala Leu Leu
1      5      10      15
His Pro Thr Ile Leu Ala Gln Gln Glu Ala Val Glu Gly Gly Cys
20      25      30
Ser His Leu Gly Gln Ser Tyr Ala Asp Arg Asp Val Trp Lys Pro Glu
35      40      45
Pro Cys Gln Ile Cys Val Cys Asp Ser Gly Ser Val Leu Cys Asp Asp
50      55      60
Ile Ile Cys Asp Asp Gln Glu Leu Asp Cys Pro Asn Pro Glu Ile Pro
65      70      75      80
Phe Gly Glu Cys Cys Ala Val Cys Pro Gln Pro Pro Thr Ala Pro Thr
85      90      95
Arg Pro Pro Asn Gly Gln Gly Pro Gln Gly Pro Lys Gly Asp Pro Gly
100     105     110
Pro Pro Gly Ile Pro Gly Arg Asn Gly Asp Pro Gly Ile Pro Gly Gln
115     120     125
Pro Gly Ser Pro Gly Ser Pro Gly Pro Pro Gly Ile Cys Glu Ser Cys
130     135     140
Pro Thr Gly Pro Gln Asn Tyr Ser Pro Gln Tyr Asp Ser Tyr Asp Val
145     150     155     160
Lys Ser Gly Val Ala Val Gly Gly Leu Ala Gly Tyr Pro Gly Pro Ala
165     170     175
Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Thr Ser Gly His Pro Gly
180     185     190
Ser Pro Gly Ser Pro Gly Tyr Gln Gly Pro Pro Gly Glu Pro Gly Gln
195     200     205
Ala Gly Pro Ser Gly Pro Pro Gly Pro Pro Gly Ala Ile Gly Pro Ser
210     215     220
Gly Pro Ala Gly Lys Asp Gly Glu Ser Gly Arg Pro Gly Arg Pro Gly
225     230     235     240
Glu Arg Gly Leu Pro Gly Pro Pro Gly Ile Lys Gly Pro Ala Gly Ile
245     250     255
Pro Gly Phe Pro Gly Met Lys Gly His Arg Gly Phe Asp Gly Arg Asn
260     265     270
Gly Glu Lys Gly Glu Thr Gly Ala Pro Gly Leu Lys Gly Glu Asn Gly
275     280     285
Leu Pro Gly Glu Asn Gly Ala Pro Gly Pro Met Gly Pro Arg Gly Ala
290     295     300
Pro Gly Glu Arg Gly Arg Pro Gly Leu Pro Gly Ala Ala Gly Ala Arg
305     310     315     320
Gly Asn Asp Gly Ala Arg Gly Ser Asp Gly Gln Pro Gly Pro Pro Gly
325     330     335
Pro Pro Gly Thr Ala Gly Phe Pro Gly Ser Pro Gly Ala Lys Gly Glu
340     345     350
Val Gly Pro Ala Gly Ser Pro Gly Ser Asn Gly Ala Pro Gly Gln Arg
355     360     365
Gly Glu Pro Gly Pro Gln Gly His Ala Gly Ala Gln Gly Pro Pro Gly
370     375     380
Pro Pro Gly Ile Asn Gly Ser Pro Gly Gly Lys Gly Glu Met Gly Pro
385     390     395     400
Ala Gly Ile Pro Gly Ala Pro Gly Leu Met Gly Ala Arg Gly Pro Pro
405     410     415
Gly Pro Ala Gly Ala Asn Gly Ala Pro Gly Leu Arg Gly Gly Ala Gly
420     425     430
Glu Pro Gly Lys Asn Gly Ala Lys Gly Glu Pro Gly Pro Arg Gly Glu
435     440     445
Arg Gly Glu Ala Gly Ile Pro Gly Val Pro Gly Ala Lys Gly Glu Asp
450     455     460
Gly Lys Asp Gly Ser Pro Gly Glu Pro Gly Ala Asn Gly Leu Pro Gly
465     470     475     480
Ala Ala Gly Glu Arg Gly Ala Pro Gly Phe Arg Gly Pro Ala Gly Pro
485     490     495
Asn Gly Ile Pro Gly Glu Lys Gly Pro Ala Gly Glu Arg Gly Ala Pro

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500					505					510				
Gly	Pro	Ala	Gly	Pro	Arg	Gly	Ala	Gly	Glu	Pro	Gly	Arg	Asp	Gly
Val	Pro	Gly	Gly	Pro	Gly	Met	Arg	Gly	Met	Pro	Gly	Ser	Pro	Gly
Pro	Gly	Ser	Asp	Gly	Lys	Pro	Gly	Pro	Pro	Gly	Ser	Gln	Gly	Ser
Gly	Arg	Pro	Gly	Pro	Pro	Gly	Pro	Ser	Gly	Pro	Arg	Gly	Gln	Pro
Val	Met	Gly	Phe	Pro	Gly	Pro	Lys	Gly	Asn	Asp	Gly	Ala	Pro	Gly
Asn	Gly	Glu	Arg	Gly	Gly	Pro	Gly	Gly	Pro	Gly	Pro	Gln	Gly	Pro
Gly	Lys	Asn	Gly	Glu	Thr	Gly	Pro	Gln	Gly	Pro	Pro	Gly	Pro	Thr
Pro	Gly	Gly	Asp	Lys	Gly	Asp	Thr	Gly	Pro	Pro	Gly	Pro	Gln	Gly
Gln	Gly	Leu	Pro	Gly	Thr	Gly	Gly	Pro	Pro	Gly	Glu	Asn	Gly	Lys
Gly	Glu	Pro	Gly	Pro	Lys	Gly	Asp	Ala	Gly	Ala	Pro	Gly	Ala	Pro
Gly	Lys	Gly	Asp	Ala	Gly	Ala	Pro	Gly	Glu	Arg	Gly	Pro	Pro	Gly
Ala	Gly	Ala	Pro	Gly	Leu	Arg	Gly	Gly	Ala	Gly	Pro	Pro	Gly	Pro
Gly	Gly	Lys	Gly	Ala	Ala	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Ala	Ala
Thr	Pro	Gly	Leu	Gln	Gly	Met	Pro	Gly	Glu	Arg	Gly	Gly	Leu	Gly
Pro	Gly	Pro	Lys	Gly	Asp	Lys	Gly	Glu	Pro	Gly	Gly	Pro	Gly	Ala
Gly	Val	Pro	Gly	Lys	Asp	Gly	Pro	Arg	Gly	Pro	Thr	Gly	Pro	Ile
Pro	Pro	Gly	Pro	Ala	Gly	Gln	Pro	Gly	Asp	Lys	Gly	Glu	Gly	Gly
Pro	Gly	Leu	Pro	Gly	Ile	Ala	Gly	Pro	Arg	Gly	Ser	Pro	Gly	Glu
Gly	Glu	Thr	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Phe	Pro	Gly	Ala	Pro
Gln	Asn	Gly	Glu	Pro	Gly	Gly	Lys	Gly	Glu	Arg	Gly	Ala	Pro	Gly
Lys	Gly	Glu	Gly	Gly	Pro	Pro	Gly	Val	Ala	Gly	Pro	Pro	Gly	Gly
Gly	Pro	Ala	Gly	Pro	Pro	Gly	Pro	Gln	Gly	Val	Lys	Gly	Glu	Arg
Ser	Pro	Gly	Gly	Pro	Gly	Ala	Ala	Gly	Phe	Pro	Gly	Ala	Arg	Gly
Pro	Gly	Pro	Pro	Gly	Ser	Asn	Gly	Asn	Pro	Gly	Pro	Pro	Gly	Pro
Gly	Ser	Pro	Gly	Lys	Asp	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Asn	Thr
Ala	Pro	Gly	Ser	Pro	Gly	Val	Ser	Gly	Pro	Lys	Gly	Asp	Ala	Gly
Pro	Gly	Glu	Lys	Gly	Ser	Pro	Gly	Ala	Gln	Gly	Pro	Pro	Gly	Ala
Gly	Pro	Leu	Gly	Ile	Ala	Gly	Ile	Thr	Gly	Ala	Arg	Gly	Leu	Ala
Pro	Pro	Gly	Met	Pro	Gly	Pro	Arg	Gly	Ser	Pro	Gly	Pro	Gln	Gly
Lys	Gly	Glu	Ser	Gly	Lys	Pro	Gly	Ala	Asn	Gly	Leu	Ser	Gly	Glu
Gly	Pro	Pro	Gly	Pro	Gln	Gly	Leu	Pro	Gly	Leu	Ala	Gly	Thr	Ala
Glu	Pro	Gly	Arg	Asp	Gly	Asn	Pro	Gly	Ser	Asp	Gly	Leu	Pro	Gly
Arg	Asp	Gly	Ser	Pro	Gly	Lys	Gly	Asp	Arg	Gly	Glu	Asn	Gly	
Ser	Pro	Gly	Ala	Pro	Gly	Ala	Pro	Gly	His	Pro	Gly	Pro	Pro	Gly

Pro Val	Gly	Pro	Ala	Gly	Lys	Ser	Gly	Asp	Arg	Gly	Glu	Ser	Gly
1055					1060					1065			
Pro Ala	Gly	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Ala	Gly	Ser	Arg	Gly
1070					1075					1080			
Ala Pro	Gly	Pro	Gln	Gly	Pro	Arg	Gly	Asp	Lys	Gly	Glu	Thr	Gly
1085					1090					1095			
Glu Arg	Gly	Ala	Ala	Gly	Ile	Lys	Gly	His	Arg	Gly	Phe	Pro	Gly
1100					1105					1110			
Asn Pro	Gly	Ala	Pro	Gly	Ser	Pro	Gly	Pro	Ala	Gly	Gln	Gln	Gly
1115					1120					1125			
Ala Ile	Gly	Ser	Pro	Gly	Pro	Ala	Gly	Pro	Arg	Gly	Pro	Val	Gly
1130					1135					1140			
Pro Ser	Gly	Pro	Pro	Gly	Lys	Asp	Gly	Thr	Ser	Gly	His	Pro	Gly
1145					1150					1155			
Pro Ile	Gly	Pro	Pro	Gly	Pro	Arg	Gly	Asn	Arg	Gly	Glu	Arg	Gly
1160					1165					1170			
Ser Glu	Gly	Ser	Pro	Gly	His	Pro	Gly	Gln	Pro	Gly	Pro	Pro	Gly
1175					1180					1185			
Pro Pro	Gly	Ala	Pro	Gly	Pro	Cys	Cys	Gly	Gly	Val	Gly	Ala	Ala
1190					1195					1200			
Ala Ile	Ala	Gly	Ile	Gly	Gly	Glu	Lys	Ala	Gly	Gly	Phe	Ala	Pro
1205					1210					1215			
Tyr Tyr	Gly	Asp	Glu	Pro	Met	Asp	Phe	Lys	Ile	Asn	Thr	Asp	Glu
1220					1225					1230			
Ile Met	Thr	Ser	Leu	Lys	Ser	Val	Asn	Gly	Gln	Ile	Glu	Ser	Leu
1235					1240					1245			
Ile Ser	Pro	Asp	Gly	Ser	Arg	Lys	Asn	Pro	Ala	Arg	Asn	Cys	Arg
1250					1255					1260			
Asp Leu	Lys	Phe	Cys	His	Pro	Glu	Leu	Lys	Ser	Gly	Glu	Tyr	Trp
1265					1270					1275			
Val Asp	Pro	Asn	Gln	Gly	Cys	Lys	Leu	Asp	Ala	Ile	Lys	Val	Phe
1280					1285					1290			
Cys Asn	Met	Glu	Thr	Gly	Glu	Thr	Cys	Ile	Ser	Ala	Asn	Pro	Leu
1295					1300					1305			
Asn Val	Pro	Arg	Lys	His	Trp	Trp	Thr	Asp	Ser	Ser	Ala	Glu	Lys
1310					1315					1320			
Lys His	Val	Trp	Phe	Gly	Glu	Ser	Met	Asp	Gly	Gly	Phe	Gln	Phe
1325					1330					1335			
Ser Tyr	Gly	Asn	Pro	Glu	Leu	Pro	Glu	Asp	Val	Leu	Asp	Val	Gln
1340					1345					1350			
Leu Ala	Phe	Leu	Arg	Leu	Leu	Ser	Ser	Arg	Ala	Ser	Gln	Asn	Ile
1355					1360					1365			
Thr Tyr	His	Cys	Lys	Asn	Ser	Ile	Ala	Tyr	Met	Asp	Gln	Ala	Ser
1370					1375					1380			
Gly Asn	Val	Lys	Lys	Ala	Leu	Lys	Leu	Met	Gly	Ser	Asn	Glu	Gly
1385					1390					1395			
Glu Phe	Lys	Ala	Glu	Gly	Asn	Ser	Lys	Phe	Thr	Tyr	Thr	Val	Leu
1400					1405					1410			
Glu Asp	Gly	Cys	Thr	Lys	His	Thr	Gly	Glu	Trp	Ser	Lys	Thr	Val
1415					1420					1425			
Phe Glu	Tyr	Arg	Thr	Arg	Lys	Ala	Val	Arg	Leu	Pro	Ile	Val	Asp
1430					1435					1440			
Ile Ala	Pro	Tyr	Asp	Ile	Gly	Gly	Pro	Asp	Gln	Glu	Phe	Gly	Val
1445					1450					1455			
Asp Val	Gly	Pro	Val	Cys	Phe	Leu							
1460					1465								

<210> 318
 <211> 1464
 <212> PRT
 <213> Homo sapiens
 <400> 318

Met	Phe	Ser	Phe	Val	Asp	Leu	Arg	Leu	Leu	Leu	Leu	Leu	Ala	Ala	Thr
1				5					10					15	
Ala	Leu	Leu	Thr	His	Gly	Gln	Glu	Glu	Gly	Gln	Val	Glu	Gly	Gln	Asp
			20					25					30		
Glu	Asp	Ile	Pro	Pro	Ile	Thr	Cys	Val	Gln	Asn	Gly	Leu	Arg	Tyr	His
		35				40					45				
Asp	Arg	Asp	Val	Trp	Lys	Pro	Glu	Pro	Cys	Arg	Ile	Cys	Val	Cys	Asp

50	Asn Gly Lys Val Leu	55	Cys Asp Asp Val Ile	60	Cys Asp Glu Thr Lys Asn
65	Cys Pro Gly Ala Glu	70	Val Pro Glu Gly Glu	75	Cys Cys Pro Val Cys Pro
	85		90		95
Asp Gly Ser Glu Ser	Pro Thr Asp Gln Glu Thr Thr Gly Val Glu Gly				
100		105		110	
Pro Lys Gly Asp Thr Gly Pro Arg Gly Pro Arg Gly Pro Ala Gly Pro		120		125	
115		135		140	
Pro Gly Arg Asp Gly Ile Pro Gly Pro Pro Gly Leu Pro Gly Pro Pro		150		155	
130		165		170	
Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Leu Gly Asn Phe Ala		185		190	
145		195		200	
Pro Gln Leu Ser Tyr Gly Tyr Asp Glu Lys Ser Thr Gly Gly Ile Ser		205		210	
160		215		220	
Val Pro Gly Pro Met Gly Pro Ser Gly Pro Arg Gly Leu Pro Gly Pro		225		230	
175		235		240	
Pro Gly Ala Pro Gly Pro Gln Gly Phe Gln Gly Pro Pro Gly Glu Pro		245		250	
180		255		260	
Gly Glu Pro Gly Ala Ser Gly Pro Met Gly Pro Arg Gly Pro Pro Gly		265		270	
195		275		280	
Pro Gly Ala Pro Gly Ala Ser Gly Asp Asp Gly Glu Ala Gly Lys Pro Gly Arg		285		290	
200		295		300	
Gly Glu Pro Gly Lys Asn Gly Asp Asp Gly Glu Ala Gly Lys Pro Gly Arg		305		310	
210		315		320	
Pro Gly Glu Arg Gly Pro Pro Gly Pro Gln Gly Ala Arg Gly Leu Pro		325		330	
225		335		340	
Pro Gly Glu Arg Gly Leu Pro Gly Met Lys Gly His Arg Gly Phe Ser Gly		345		350	
230		355		360	
Gly Thr Ala Gly Leu Pro Gly Asp Ala Gly Pro Ala Gly Pro Lys Gly Glu		365		370	
240		375		380	
Leu Asp Gly Ala Lys Gly Asp Ala Gly Pro Ala Gly Pro Met Gly Pro Arg		385		390	
250		395		400	
Pro Gly Ser Pro Gly Glu Asn Gly Arg Pro Gly Ala Pro Gly Gln Met Gly Pro		405		410	
260		415		420	
Gly Leu Pro Gly Glu Arg Gly Ala Thr Gly Ala Ala Gly Pro Pro Gly Pro		425		430	
270		435		440	
Ala Arg Gly Asn Asp Gly Ala Thr Gly Ala Thr Gly Ala Val Gly Ala Lys		445		450	
280		455		460	
Thr Gly Pro Ala Gly Pro Pro Gly Phe Pro Gly Ala Val Gly Pro Gln Gly		465		470	
290		475		480	
Gly Glu Ala Gly Pro Gln Gly Pro Arg Gly Ser Glu Gly Pro Ala Gly		485		490	
300		495		500	
Val Arg Gly Glu Pro Gly Ala Asp Gly Gln Pro Gly Ala Lys Gly Ala Asn		505		510	
310		515		520	
Ala Gly Asn Pro Gly Ile Ala Gly Ala Pro Gly Phe Pro Gly Ala Arg Gly		525		530	
320		535		540	
Gly Ala Pro Gly Pro Gln Gly Pro Gly Gly Pro Pro Gly Pro Lys Asn		545		550	
330		555		560	
Thr Gly Pro Ala Gly Pro Pro Gly Ser Lys Gly Asp Thr Gly Ala Lys		565		570	
340		575		580	
Gly Glu Ala Gly Pro Val Gly Val Gln Gly Pro Pro Gly Pro Ala Gly		585		590	
350		595		600	
Val Arg Gly Glu Pro Gly Arg Gly Ala Arg Gly Thr Gly Leu					
360					
Gly Glu Gly Lys Arg Gly Ala Arg Gly Glu Pro Gly Pro Thr Gly Leu					
370					
Pro Gly Pro Pro Gly Glu Arg Gly Gly Pro Gly Ser Arg Gly Phe Pro					
380					
Gly Ala Asp Gly Val Ala Gly Pro Lys Gly Pro Ala Gly Glu Arg Gly					
390					
Ser Pro Gly Pro Ala Gly Pro Lys Gly Ser Pro Gly Glu Ala Gly Arg					
400					
Pro Gly Glu Ala Gly Leu Pro Gly Ala Lys Gly Leu Thr Gly Ser Pro					
410					
Gly Ser Pro Gly Pro Asp Gly Lys Thr Gly Pro Pro Gly Pro Ala Gly					
420					
Gln Asp Gly Arg Pro Gly Pro Pro Gly Pro Gly Ala Arg Gly Gln					
430					
Ala Gly Val Met Gly Phe Pro Gly Pro Lys Gly Ala Ala Gly Glu Pro					
440					
Gly Lys Ala Gly Glu Arg Gly Val Pro Gly Pro Gly Pro Ala Val Gly					
450					

Pro Ala Gly Lys Asp Gly Glu Ala Gly Ala Gln Gly Pro Pro Gly Pro
 610 615 620
 Ala Gly Pro Ala Gly Glu Arg Gly Glu Gln Gly Pro Ala Gly Ser Pro
 625 630 635 640
 Gly Phe Gln Gly Leu Pro Gly Pro Ala Gly Pro Pro Gly Glu Ala Gly
 645 650 655
 Lys Pro Gly Glu Gln Gly Val Pro Gly Asp Leu Gly Ala Pro Gly Pro
 660 665 670
 Ser Gly Ala Arg Gly Glu Arg Gly Phe Pro Gly Glu Arg Gly Val Gln
 675 680 685
 Gly Pro Pro Gly Pro Ala Gly Pro Arg Gly Ala Asn Gly Ala Pro Gly
 690 695 700
 Asn Asp Gly Ala Lys Gly Asp Ala Gly Ala Pro Gly Ala Pro Gly Ser
 705 710 715 720
 Gln Gly Ala Pro Gly Leu Gln Gly Met Pro Gly Glu Arg Gly Ala Ala
 725 730 735
 Gly Leu Pro Gly Pro Lys Gly Asp Arg Gly Asp Ala Gly Pro Lys Gly
 740 745 750
 Ala Asp Gly Ser Pro Gly Lys Asp Gly Val Arg Gly Leu Thr Gly Pro
 755 760 765
 Ile Gly Pro Pro Gly Pro Ala Gly Ala Pro Gly Asp Lys Gly Glu Ser
 770 775 780
 Gly Pro Ser Gly Pro Ala Gly Pro Thr Gly Ala Arg Gly Ala Pro Gly
 785 790 795 800
 Asp Arg Gly Glu Pro Gly Pro Pro Gly Pro Ala Gly Phe Ala Gly Pro
 805 810 815
 Pro Gly Ala Asp Gly Gln Pro Gly Ala Lys Gly Glu Pro Gly Asp Ala
 820 825 830
 Gly Ala Lys Gly Asp Ala Gly Pro Pro Gly Pro Ala Gly Pro Ala Gly
 835 840 845
 Pro Pro Gly Pro Ile Gly Asn Val Gly Ala Pro Gly Ala Lys Gly Ala
 850 855 860
 Arg Gly Ser Ala Gly Pro Pro Gly Ala Thr Gly Phe Pro Gly Ala Ala
 865 870 875 880
 Gly Arg Val Gly Pro Pro Gly Pro Ser Gly Asn Ala Gly Pro Pro Gly
 885 890 895
 Pro Pro Gly Pro Ala Gly Lys Glu Gly Gly Lys Gly Pro Arg Gly Glu
 900 905 910
 Thr Gly Pro Ala Gly Arg Pro Gly Glu Val Gly Pro Pro Gly Pro Pro
 915 920 925
 Gly Pro Ala Gly Glu Lys Gly Ser Pro Gly Ala Asp Gly Pro Ala Gly
 930 935 940
 Ala Pro Gly Thr Pro Gly Pro Gln Gly Ile Ala Gly Gln Arg Gly Val
 945 950 955 960
 Val Gly Leu Pro Gly Gln Arg Gly Glu Arg Gly Phe Pro Gly Leu Pro
 965 970 975
 Gly Pro Ser Gly Glu Pro Gly Lys Gln Gly Pro Ser Gly Ala Ser Gly
 980 985 990
 Glu Arg Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Leu Ala Gly Pro
 995 1000 1005
 Pro Gly Glu Ser Gly Arg Glu Gly Ala Pro Ala Ala Glu Gly Ser
 1010 1015 1020
 Pro Gly Arg Asp Gly Ser Pro Gly Ala Lys Gly Asp Arg Gly Glu
 1025 1030 1035
 Thr Gly Pro Ala Gly Pro Pro Gly Ala Pro Gly Ala Pro Gly Ala
 1040 1045 1050
 Pro Gly Pro Val Gly Pro Ala Gly Lys Ser Gly Asp Arg Gly Glu
 1055 1060 1065
 Thr Gly Pro Ala Gly Pro Ala Gly Pro Val Gly Pro Val Gly Ala
 1070 1075 1080
 Arg Gly Pro Ala Gly Pro Gln Gly Pro Arg Gly Asp Lys Gly Glu
 1085 1090 1095
 Thr Gly Glu Gln Gly Asp Arg Gly Ile Lys Gly His Arg Gly Phe
 1100 1105 1110
 Ser Gly Leu Gln Gly Pro Pro Gly Pro Pro Gly Ser Pro Gly Glu
 1115 1120 1125
 Gln Gly Pro Ser Gly Ala Ser Gly Pro Ala Gly Pro Arg Gly Pro
 1130 1135 1140
 Pro Gly Ser Ala Gly Ala Pro Gly Lys Asp Gly Leu Asn Gly Leu

1145	Pro Gly	Pro Ile Gly	Pro Pro	1150	Gly Pro Arg Gly	1155	Arg Thr Gly Asp
1160	Ala Gly	Pro Val Gly	Pro Pro	1165	Gly Pro Pro Gly	1170	Pro Pro Gly Pro
1175	Pro Gly	Pro Pro Ser	Ala Gly	1180	Phe Asp Phe Ser	1185	Phe Leu Pro Gln
1190	Pro Pro	Gln Glu Lys	Ala His	1195	Asp Gly Gly Arg	1200	Tyr Tyr Arg Ala
1205	Asp Asp	Ala Asn Val	Val Arg	1210	Asp Arg Asp Leu	1215	Glu Val Asp Thr
1220	Thr Leu	Lys Ser Leu	Ser Gln	1225	Gln Ile Glu Asn	1230	Ile Arg Ser Pro
1235	Glu Gly	Ser Arg Lys	Asn Pro	1240	Ala Arg Thr Cys	1245	Arg Asp Leu Lys
1250	Met Cys	His Ser Asp	Trp Lys	1255	Ser Gly Glu Tyr	1260	Trp Ile Asp Pro
1265	Asn Gln	Gly Cys Asn	Leu Asp	1270	Ala Ile Lys Val	1275	Phe Cys Asn Met
1280	Glu Thr	Gly Glu Thr	Cys Val	1285	Tyr Pro Thr Gln	1290	Pro Ser Val Ala
1295	Gln Lys	Asn Trp Tyr	Ile Ser	1300	Lys Asn Pro Lys	1305	Asp Lys Arg His
1310	Val Trp	Phe Gly Glu	Ser Met	1315	Thr Asp Gly Phe	1320	Gln Phe Glu Tyr
1325	Gly Gly	Gln Gly Ser	Asp Pro	1330	Ala Asp Val Ala	1335	Ile Gln Leu Thr
1340	Phe Leu	Arg Leu Met	Ser Thr	1345	Glu Ala Ser Gln	1350	Asn Ile Thr Tyr
1355	His Cys	Lys Asn Ser	Val Ala	1360	Tyr Met Asp Gln	1365	Gln Thr Gly Asn
1370	Leu Lys	Lys Ala Leu	Leu Leu	1375	Lys Gly Ser Asn	1380	Glu Ile Glu Ile
1385	Arg Ala	Glu Gly Asn	Ser Arg	1390	Phe Thr Tyr Ser	1395	Val Thr Val Asp
1400	Gly Cys	Thr Ser His	Thr Gly	1405	Ala Trp Gly Lys	1410	Thr Val Ile Glu
1415	Tyr Lys	Thr Thr Lys	Ser Ser	1420	Arg Leu Pro Ile	1425	Ile Asp Val Ala
1430	Pro Leu	Asp Val Gly	Ala Pro	1435	Asp Gln Glu Phe	1440	Gly Phe Asp Val
1445	Gly Pro	Val Cys Phe	Leu	1450		1455	
1460							

<210> 319

<211> 764

<212> PRT

<213> Homo sapiens

<400> 319

Met Gly	Ser Asn	Leu Ser	Pro Gln	Leu Cys	Leu Met	Pro Phe	Ile Leu
1	5	10	15	20	25	30	35
Gly Leu	Leu Ser	Gly Gly	Val Thr	Thr Thr	Pro Trp	Ser Leu	Ala Gln
Pro Gln	Gly Ser	Cys Ser	Leu Glu	Gly Val	Glu Ile	Lys Gly	Gly Ser
Phe Arg	Leu Leu	Gln Glu	Gly Gln	Ala Leu	Glu Tyr	Val Cys	Pro Ser
50	55	60	65	70	75	80	85
Gly Phe	Tyr Pro	Tyr Pro	Val Gln	Thr Arg	Thr Cys	Arg Ser	Thr Gly
65	70	75	80	85	90	95	100
Ser Trp	Ser Thr	Leu Lys	Thr Gln	Asp Gln	Lys Thr	Val Arg	Lys Ala
Glu Cys	Arg Ala	Ile His	Cys Pro	Arg Pro	His Asp	Phe Glu	Asn Gly
100	105	110	115	120	125	130	135
Glu Tyr	Trp Pro	Arg Ser	Pro Tyr	Thr Asn	Val Ser	Asp Glu	Ile Ser
Phe His	Cys Tyr	Asp Gly	Tyr Thr	Leu Arg	Gly Ser	Ala Asn	Arg Thr
130	135	140	145	150	155	160	165
Cys Gln	Val Asn	Gly Arg	Trp Ser	Gly Gln	Thr Ala	Ile Cys	Asp Asn

Gly Ala Gly Tyr Cys Ser Asn Pro Gly Ile Pro Ile Gly Thr Arg Lys
 165 170 175
 Val Gly Ser Gln Tyr Arg Leu Glu Asp Ser Val Thr Tyr His Cys Ser
 180 185 190
 Arg Gly Leu Thr Leu Arg Gly Ser Gln Arg Arg Thr Cys Gln Glu Gly
 195 200 205
 Gly Ser Trp Ser Gly Thr Glu Pro Ser Cys Gln Asp Ser Phe Met Tyr
 210 215 220
 Asp Thr Pro Gln Glu Val Ala Glu Ala Phe Leu Ser Ser Leu Thr Glu
 225 230 235 240
 Thr Ile Glu Gly Val Asp Ala Glu Asp Gly His Gly Pro Gly Glu Gln
 245 250 255
 Gln Lys Arg Lys Ile Val Leu Asp Pro Ser Gly Ser Met Asn Ile Tyr
 260 265 270
 Leu Val Leu Asp Gly Ser Asp Ser Ile Gly Ala Ser Asn Phe Thr Gly
 275 280 285
 Ala Lys Lys Cys Leu Val Asn Leu Ile Glu Lys Val Ala Ser Tyr Gly
 290 295 300
 Val Lys Pro Arg Tyr Gly Leu Val Thr Tyr Ala Thr Tyr Pro Lys Ile
 305 310 315 320
 Trp Val Lys Val Ser Glu Ala Asp Ser Ser Asn Ala Asp Trp Val Thr
 325 330 335
 Lys Gln Leu Asn Glu Ile Asn Tyr Glu Asp His Lys Leu Lys Ser Gly
 340 345 350
 Thr Asn Thr Lys Lys Ala Leu Gln Ala Val Tyr Ser Met Met Ser Trp
 355 360 365
 Pro Asp Asp Val Pro Pro Glu Gly Trp Asn Arg Thr Arg His Val Ile
 370 375 380
 Ile Leu Met Thr Asp Gly Leu His Asn Met Gly Gly Asp Pro Ile Thr
 385 390 395 400
 Val Ile Asp Glu Ile Arg Asp Leu Leu Tyr Ile Gly Lys Asp Arg Lys
 405 410 415
 Asn Pro Arg Glu Asp Tyr Leu Asp Val Tyr Val Phe Gly Val Gly Pro
 420 425 430
 Leu Val Asn Gln Val Asn Ile Asn Ala Leu Ala Ser Lys Lys Asp Asn
 435 440 445
 Glu Gln His Val Phe Lys Val Lys Asp Met Glu Asn Leu Glu Asp Val
 450 455 460
 Phe Tyr Gln Met Ile Asp Glu Ser Gln Ser Leu Ser Leu Cys Gly Met
 465 470 475 480
 Val Trp Glu His Arg Lys Gly Thr Asp Tyr His Lys Gln Pro Trp Gln
 485 490 495
 Ala Lys Ile Ser Val Ile Arg Pro Ser Lys Gly His Glu Ser Cys Met
 500 505 510
 Gly Ala Val Val Ser Glu Tyr Phe Val Leu Thr Ala Ala His Cys Phe
 515 520 525
 Thr Val Asp Asp Lys Glu His Ser Ile Lys Val Ser Val Gly Gly Glu
 530 535 540
 Lys Arg Asp Leu Glu Ile Glu Val Val Leu Phe His Pro Asn Tyr Asn
 545 550 555 560
 Ile Asn Gly Lys Lys Glu Ala Gly Ile Pro Glu Phe Tyr Asp Tyr Asp
 565 570 575
 Val Ala Leu Ile Lys Leu Lys Asn Lys Leu Lys Tyr Gly Gln Thr Ile
 580 585 590
 Arg Pro Ile Cys Leu Pro Cys Thr Glu Gly Thr Thr Arg Ala Leu Arg
 595 600 605
 Leu Pro Pro Thr Thr Thr Cys Gln Gln Gln Lys Glu Glu Leu Leu Pro
 610 615 620
 Ala Gln Asp Ile Lys Ala Leu Phe Val Ser Glu Glu Glu Lys Lys Leu
 625 630 635 640
 Thr Arg Lys Glu Val Tyr Ile Lys Asn Gly Asp Lys Lys Gly Ser Cys
 645 650 655
 Glu Arg Asp Ala Gln Tyr Ala Pro Gly Tyr Asp Lys Val Lys Asp Ile
 660 665 670
 Ser Glu Val Val Thr Pro Arg Phe Leu Cys Thr Gly Gly Val Ser Pro
 675 680 685
 Tyr Ala Asp Pro Asn Thr Cys Arg Gly Asp Ser Gly Gly Pro Leu Ile
 690 695 700
 Val His Lys Arg Ser Arg Phe Ile Gln Val Gly Val Ile Ser Trp Gly

705
 Val Val Asp Val Cys Lys Asn Gln Lys Arg Gln Lys Gln Val Pro Ala
 725 730 735
 His Ala Arg Asp Phe His Ile Asn Leu Phe Gln Val Leu Pro Trp Leu
 740 745 750
 Lys Glu Lys Leu Gln Asp Glu Asp Leu Gly Phe Leu
 755 760

<210> 320
 <211> 909
 <212> PRT
 <213> Homo sapiens
 <400> 320

Met Ala Ala Arg Pro Leu Pro Val Ser Pro Ala Arg Ala Leu Leu Leu
 1 5 10 15
 Ala Leu Ala Gly Ala Leu Leu Ala Pro Cys Glu Ala Arg Gly Val Ser
 20 25 30
 Leu Trp Asn Gln Gly Arg Ala Asp Glu Val Val Ser Ala Ser Val Arg
 35 40 45
 Ser Gly Asp Leu Trp Ile Pro Val Lys Ser Phe Asp Ser Lys Asn His
 50 55 60
 Pro Glu Val Leu Asn Ile Arg Leu Gln Arg Glu Ser Lys Glu Leu Ile
 65 70 75 80
 Ile Asn Leu Glu Arg Asn Glu Gly Leu Ile Ala Ser Ser Phe Thr Glu
 85 90 95
 Thr His Tyr Leu Gln Asp Gly Thr Asp Val Ser Leu Ala Arg Asn Tyr
 100 105 110
 Thr Val Ile Leu Gly His Cys Tyr Tyr His Gly His Val Arg Gly Tyr
 115 120 125
 Ser Asp Ser Ala Val Ser Leu Ser Thr Cys Ser Gly Leu Arg Gly Leu
 130 135 140
 Ile Val Phe Glu Asn Glu Ser Tyr Val Leu Glu Pro Met Lys Ser Ala
 145 150 155 160
 Thr Asn Arg Tyr Lys Leu Phe Pro Ala Lys Lys Leu Lys Ser Val Arg
 165 170 175
 Gly Ser Cys Gly Ser His His Asn Thr Pro Asn Leu Ala Ala Lys Asn
 180 185 190
 Val Phe Pro Pro Pro Ser Gln Thr Trp Ala Arg Arg His Lys Arg Glu
 195 200 205
 Thr Leu Lys Ala Thr Lys Tyr Val Glu Leu Val Ile Val Ala Asp Asn
 210 215 220
 Arg Glu Phe Gln Arg Gln Gly Lys Asp Leu Glu Lys Val Lys Gln Arg
 225 230 235 240
 Leu Ile Glu Ile Ala Asn His Val Asp Lys Phe Tyr Arg Pro Leu Asn
 245 250 255
 Ile Arg Ile Val Leu Val Gly Val Glu Val Trp Asn Asp Met Asp Lys
 260 265 270
 Cys Ser Val Ser Gln Asp Pro Phe Thr Ser Leu His Glu Phe Leu Asp
 275 280 285
 Trp Arg Lys Met Lys Leu Leu Pro Arg Lys Ser His Asp Asn Ala Gln
 290 295 300
 Leu Val Ser Gly Val Tyr Phe Gln Gly Thr Thr Ile Gly Met Ala Pro
 305 310 315 320
 Ile Met Ser Met Cys Thr Ala Asp Gln Ser Gly Gly Ile Val Met Asp
 325 330 335
 His Ser Asp Asn Pro Leu Gly Ala Ala Val Thr Leu Ala His Glu Leu
 340 345 350
 Gly His Asn Phe Gly Met Asn His Asp Thr Leu Asp Arg Gly Cys Ser
 355 360 365
 Cys Gln Met Ala Val Glu Lys Gly Gly Cys Ile Met Asn Ala Ser Thr
 370 375 380
 Gly Tyr Pro Phe Pro Met Val Phe Ser Ser Cys Ser Arg Lys Asp Leu
 385 390 395 400
 Glu Thr Ser Leu Glu Lys Gly Met Gly Val Cys Leu Phe Asn Leu Pro
 405 410 415
 Glu Val Arg Glu Ser Phe Gly Gly Gln Lys Cys Gly Asn Arg Phe Val
 420 425 430
 Glu Glu Gly Glu Glu Cys Asp Cys Gly Glu Pro Glu Glu Cys Met Asn
 435 440 445

Arg Cys Cys Asn Ala Thr Thr Cys Thr Leu Lys Pro Asp Ala Val Cys
 450 455 460
 Ala His Gly Leu Cys Cys Glu Asp Cys Gln Leu Lys Pro Ala Gly Thr
 465 470 475 480
 Ala Cys Arg Asp Ser Ser Asn Ser Cys Asp Leu Pro Glu Phe Cys Thr
 485 490 495
 Gly Ala Ser Pro His Cys Pro Ala Asn Val Tyr Leu His Asp Gly His
 500 505 510
 Ser Cys Gln Asp Val Asp Gly Tyr Cys Tyr Asn Gly Ile Cys Gln Thr
 515 520 525
 His Glu Gln Gln Cys Val Thr Leu Trp Gly Pro Gly Ala Lys Pro Ala
 530 535 540
 Pro Gly Ile Cys Phe Glu Arg Val Asn Ser Ala Gly Asp Pro Tyr Gly
 545 550 555 560
 Asn Cys Gly Lys Val Ser Lys Ser Ser Phe Ala Lys Cys Glu Met Arg
 565 570 575
 Asp Ala Lys Cys Gly Lys Ile Gln Cys Gln Gly Gly Ala Ser Arg Pro
 580 585 590
 Val Ile Gly Thr Asn Ala Val Ser Ile Glu Thr Asn Ile Pro Leu Gln
 595 600 605
 Gln Gly Gly Arg Ile Leu Cys Arg Gly Thr His Val Tyr Leu Gly Asp
 610 615 620
 Asp Met Pro Asp Pro Gly Leu Val Leu Ala Gly Thr Lys Cys Ala Asp
 625 630 635 640
 Gly Lys Ile Cys Leu Asn Arg Gln Cys Gln Asn Ile Ser Val Phe Gly
 645 650 655
 Val His Glu Cys Ala Met Gln Cys His Gly Arg Gly Val Cys Asn Asn
 660 665 670
 Arg Lys Asn Cys His Cys Glu Ala His Trp Ala Pro Pro Phe Cys Asp
 675 680 685
 Lys Phe Gly Phe Gly Gly Ser Thr Asp Ser Gly Pro Ile Arg Gln Ala
 690 695 700
 Asp Asn Gln Gly Leu Thr Ile Gly Ile Leu Val Thr Ile Leu Cys Leu
 705 710 715 720
 Leu Ala Ala Gly Phe Val Val Tyr Leu Lys Arg Lys Thr Leu Ile Arg
 725 730 735
 Leu Leu Phe Thr Asn Lys Lys Thr Thr Ile Glu Lys Leu Arg Cys Val
 740 745 750
 Arg Pro Ser Arg Pro Pro Arg Gly Phe Gln Pro Cys Gln Ala His Leu
 755 760 765
 Gly His Leu Gly Lys Gly Leu Met Arg Lys Pro Pro Asp Ser Tyr Pro
 770 775 780
 Pro Lys Asp Asn Pro Arg Arg Leu Leu Gln Cys Gln Asn Val Asp Ile
 785 790 795 800
 Ser Arg Pro Leu Asn Gly Leu Asn Val Pro Gln Pro Gln Ser Thr Gln
 805 810 815
 Arg Val Leu Pro Pro Leu His Arg Ala Pro Arg Ala Pro Ser Val Pro
 820 825 830
 Ala Arg Pro Leu Pro Ala Lys Pro Ala Leu Arg Gln Ala Gln Gly Thr
 835 840 845
 Cys Lys Pro Asn Pro Pro Gln Lys Pro Leu Pro Ala Asp Pro Leu Ala
 850 855 860
 Arg Thr Thr Arg Leu Thr His Ala Leu Ala Arg Thr Pro Gly Gln Trp
 865 870 875 880
 Glu Thr Gly Leu Arg Leu Ala Pro Leu Arg Pro Ala Pro Gln Tyr Pro
 885 890 895
 His Gln Val Pro Arg Ser Thr His Thr Ala Tyr Ile Lys
 900 905

<210> 321

<211> 574

<212> PRT

<213> Homo sapiens

<400> 321

Met Ala Leu Ala Arg Gly Ser Arg Gln Leu Gly Ala Leu Val Trp Gly
 1 5 10 15
 Ala Cys Leu Cys Val Leu Val His Gly Gln Gln Ala Gln Pro Gly Gln
 20 25 30
 Gly Ser Asp Pro Ala Arg Trp Arg Gln Leu Ile Gln Trp Glu Asn Asn

<210> 322

<211> 344
 <212> PRT
 <213> Homo sapiens
 <400> 322

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Met Gly Pro Pro Ser Ala Pro Pro Cys Arg Leu His Val Pro Trp Lys
1      5      10      15
Glu Val Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr
      20      25      30
Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val Ala Glu Gly
      35      40      45
Lys Glu Val Leu Leu Leu Ala His Asn Leu Pro Gln Asn Arg Ile Gly
      50      55      60
Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Ser Leu Ile Val
65      70      75      80
Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Tyr Ser
      85      90      95
Gly Arg Glu Thr Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Val
      100      105      110
Thr Gln Asn Asp Thr Gly Phe Tyr Thr Leu Gln Val Ile Lys Ser Asp
      115      120      125
Leu Val Asn Glu Glu Ala Thr Gly Gln Phe His Val Tyr Pro Glu Leu
      130      135      140
Pro Lys Pro Ser Ile Ser Ser Asn Asn Ser Asn Pro Val Glu Asp Lys
145      150      155      160
Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Val Gln Asn Thr Thr Tyr
      165      170      175
Leu Trp Trp Val Asn Gly Gln Ser Leu Pro Val Ser Pro Arg Leu Gln
      180      185      190
Leu Ser Asn Gly Asn Met Thr Leu Thr Leu Leu Ser Val Lys Arg Asn
      195      200      205
Asp Ala Gly Ser Tyr Glu Cys Glu Ile Gln Asn Pro Ala Ser Ala Asn
210      215      220
Arg Ser Asp Pro Val Thr Leu Asn Val Leu Tyr Gly Pro Asp Val Pro
225      230      235      240
Thr Ile Ser Pro Ser Lys Ala Asn Tyr Arg Pro Gly Glu Asn Leu Asn
      245      250      255
Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Phe
      260      265      270
Ile Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn
275      280      285
Ile Thr Val Asn Asn Ser Gly Ser Tyr Met Cys Gln Ala His Asn Ser
290      295      300
Ala Thr Gly Leu Asn Arg Thr Thr Val Thr Met Ile Thr Val Ser Gly
305      310      315      320
Ser Ala Pro Val Leu Ser Ala Val Ala Thr Val Gly Ile Thr Ile Gly
      325      330      335
Val Leu Ala Arg Val Ala Leu Ile
      340

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<210> 323
 <211> 488
 <212> PRT
 <213> Homo sapiens
 <400> 323

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Met Ala Pro Ala Ala Trp Leu Arg Ser Ala Ala Ala Arg Ala Leu Leu
1      5      10      15
Pro Pro Met Leu Leu Leu Leu Leu Gln Pro Pro Pro Leu Leu Ala Arg
      20      25      30
Ala Leu Pro Pro Asp Val His His Leu His Ala Glu Arg Gly Pro
      35      40      45
Gln Pro Trp His Ala Ala Leu Pro Ser Ser Pro Ala Pro Ala Pro Ala
50      55      60
Thr Gln Glu Ala Pro Arg Pro Ala Ser Ser Leu Arg Pro Pro Arg Cys
65      70      75      80
Gly Val Pro Asp Pro Ser Asp Gly Leu Ser Ala Arg Asn Arg Gln Lys
      85      90      95
Arg Phe Val Leu Ser Gly Gly Arg Trp Glu Lys Thr Asp Leu Thr Tyr
100      105      110
Arg Ile Leu Arg Phe Pro Trp Gln Leu Val Gln Glu Gln Val Arg Gln

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115
 Thr Met Ala Glu Ala Leu Lys Val Trp Ser Asp Val Thr Pro Leu Thr
 130
 Phe Thr Glu Val His Glu Gly Arg Ala Asp Ile Met Ile Asp Phe Ala
 145
 Arg Tyr Trp His Gly Asp Asp Leu Pro Phe Asp Gly Pro Gly Gly Ile
 165
 Leu Ala His Ala Phe Phe Pro Lys Thr His Arg Glu Gly Asp Val His
 180
 Phe Asp Tyr Asp Glu Thr Trp Thr Ile Gly Asp Asp Gln Gly Thr Asp
 195
 Leu Leu Gln Val Ala Ala His Glu Phe Gly His Val Leu Gly Leu Gln
 210
 His Thr Thr Ala Ala Lys Ala Leu Met Ser Ala Phe Tyr Thr Phe Arg
 225
 Tyr Pro Leu Ser Leu Ser Pro Asp Asp Cys Arg Gly Val Gln His Leu
 245
 Tyr Gly Gln Pro Trp Pro Thr Val Thr Ser Arg Thr Pro Ala Leu Gly
 260
 Pro Gln Ala Gly Ile Asp Thr Asn Glu Ile Ala Pro Leu Glu Pro Asp
 275
 Ala Pro Pro Asp Ala Cys Glu Ala Ser Phe Asp Ala Val Ser Thr Ile
 290
 Arg Gly Glu Leu Phe Phe Phe Lys Ala Gly Phe Val Trp Arg Leu Arg
 305
 Gly Gly Gln Leu Gln Pro Gly Tyr Pro Ala Leu Ala Ser Arg His Trp
 325
 Gln Gly Leu Pro Ser Pro Val Asp Ala Ala Phe Glu Asp Ala Gln Gly
 340
 His Ile Trp Phe Phe Gln Gly Ala Gln Tyr Trp Val Tyr Asp Gly Glu
 355
 Lys Pro Val Leu Gly Pro Ala Pro Leu Thr Glu Leu Gly Leu Val Arg
 370
 Phe Pro Val His Ala Ala Leu Val Trp Gly Pro Glu Lys Asn Lys Ile
 385
 Tyr Phe Phe Arg Gly Arg Asp Tyr Trp Arg Phe His Pro Ser Thr Arg
 405
 Arg Val Asp Ser Pro Val Pro Arg Arg Ala Thr Asp Trp Arg Gly Val
 420
 Pro Ser Glu Ile Asp Ala Ala Phe Gln Asp Ala Asp Gly Tyr Ala Tyr
 435
 Phe Leu Arg Gly Arg Leu Tyr Trp Lys Phe Asp Pro Val Lys Val Lys
 450
 Ala Leu Glu Gly Phe Pro Arg Leu Val Gly Pro Asp Phe Phe Gly Cys
 465
 Ala Glu Pro Ala Asn Thr Phe Leu
 485

<210> 324

<211> 469

<212> PRT

<213> Homo sapiens

<400> 324

Met His Ser Phe Pro Pro Leu Leu Leu Leu Leu Phe Trp Gly Val Val
 1
 Ser His Ser Phe Pro Ala Thr Leu Glu Thr Gln Glu Gln Asp Val Asp
 20
 Leu Val Gln Lys Tyr Leu Glu Lys Tyr Tyr Asn Leu Lys Asn Asp Gly
 35
 Arg Gln Val Glu Lys Arg Arg Asn Ser Gly Pro Val Val Glu Lys Leu
 50
 Lys Gln Met Gln Glu Phe Phe Gly Leu Lys Val Thr Gly Lys Pro Asp
 65
 Ala Glu Thr Leu Lys Val Met Lys Gln Pro Arg Cys Gly Val Pro Asp
 85
 Val Ala Gln Phe Val Leu Thr Glu Gly Asn Pro Arg Trp Glu Gln Thr
 100
 His Leu Thr Tyr Arg Ile Glu Asn Tyr Thr Pro Asp Leu Pro Arg Ala
 115
 120
 125

Asp Val Asp His Ala Ile Glu Lys Ala Phe Gln Leu Trp Ser Asn Val
 130 135 140
 Thr Pro Leu Thr Phe Thr Lys Val Ser Glu Gly Gln Ala Asp Ile Met
 145 150 155 160
 Ile Ser Phe Val Arg Gly Asp His Arg Asp Asn Ser Pro Phe Asp Gly
 165 170 175
 Pro Gly Gly Asn Leu Ala His Ala Phe Gln Pro Gly Pro Gly Ile Gly
 180 185 190
 Gly Asp Ala His Phe Asp Glu Asp Glu Arg Trp Thr Asn Asn Phe Arg
 195 200 205
 Glu Tyr Asn Leu His Arg Val Ala Ala His Glu Leu Gly His Ser Leu
 210 215 220
 Gly Leu Ser His Ser Thr Asp Ile Gly Ala Leu Met Tyr Pro Ser Tyr
 225 230 235 240
 Thr Phe Ser Gly Asp Val Gln Leu Ala Gln Asp Asp Ile Asp Gly Ile
 245 250 255
 Gln Ala Ile Tyr Gly Arg Ser Gln Asn Pro Val Gln Pro Ile Gly Pro
 260 265 270
 Gln Thr Pro Lys Ala Cys Asp Ser Lys Leu Thr Phe Asp Ala Ile Thr
 275 280 285
 Thr Ile Arg Gly Glu Val Met Phe Phe Lys Asp Arg Phe Tyr Met Arg
 290 295 300
 Thr Asn Pro Phe Tyr Pro Glu Val Glu Leu Asn Phe Ile Ser Val Phe
 305 310 315 320
 Trp Pro Gln Leu Pro Asn Gly Leu Glu Ala Tyr Glu Phe Ala Asp
 325 330 335
 Arg Asp Glu Val Arg Phe Phe Lys Gly Asn Lys Tyr Trp Ala Val Gln
 340 345 350
 Gly Gln Asn Val Leu His Gly Tyr Pro Lys Asp Ile Tyr Ser Ser Phe
 355 360 365
 Gly Phe Pro Arg Thr Val Lys His Ile Asp Ala Ala Leu Ser Glu Glu
 370 375 380
 Asn Thr Gly Lys Thr Tyr Phe Phe Val Ala Asn Lys Tyr Trp Arg Tyr
 385 390 395 400
 Asp Glu Tyr Lys Arg Ser Met Asp Pro Gly Tyr Pro Lys Met Ile Ala
 405 410 415
 His Asp Phe Pro Gly Ile Gly His Lys Val Asp Ala Val Phe Met Lys
 420 425 430
 Asp Gly Phe Phe Tyr Phe Phe His Gly Thr Arg Gln Tyr Lys Phe Asp
 435 440 445
 Pro Lys Thr Lys Arg Ile Leu Thr Leu Gln Lys Ala Asn Ser Trp Phe
 450 455 460
 Asn Cys Arg Lys Asn
 465

<210> 325
 <211> 471
 <212> PRT
 <213> Homo sapiens
 <400> 325

Met His Pro Gly Val Leu Ala Ala Phe Leu Phe Leu Ser Trp Thr His
 1 5 10 15
 Cys Arg Ala Leu Pro Leu Pro Ser Gly Gly Asp Glu Asp Asp Leu Ser
 20 25 30
 Glu Glu Asp Leu Gln Phe Ala Glu Arg Tyr Leu Arg Ser Tyr Tyr His
 35 40 45
 Pro Thr Asn Leu Ala Gly Ile Leu Lys Glu Asn Ala Ala Ser Ser Met
 50 55 60
 Thr Glu Arg Leu Arg Glu Met Gln Ser Phe Phe Gly Leu Glu Val Thr
 65 70 75 80
 Gly Lys Leu Asp Asp Asn Thr Leu Asp Val Met Lys Lys Pro Arg Cys
 85 90 95
 Gly Val Pro Asp Val Gly Glu Tyr Asn Val Phe Pro Arg Thr Leu Lys
 100 105 110
 Trp Ser Lys Met Asn Leu Thr Tyr Arg Ile Val Asn Tyr Thr Pro Asp
 115 120 125
 Met Thr His Ser Glu Val Glu Lys Ala Phe Lys Lys Ala Phe Lys Val
 130 135 140
 Trp Ser Asp Val Thr Pro Leu Asn Phe Thr Arg Leu His Asp Gly Ile

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Ala Ala Gln Thr Thr Asp Gly Lys Leu Pro Glu Val Thr Lys Asp Val
 180 185 190
 Glu Arg Thr Asp Gly Ala Leu Leu Val Asn Ala Met Phe Phe Lys Pro
 195 200 205
 His Trp Asp Glu Lys Phe His His Lys Met Val Asp Asn Arg Gly Phe
 210 215 220
 Met Val Thr Arg Ser Tyr Thr Val Gly Val Met Met His Arg Thr
 225 230 235 240
 Gly Leu Tyr Asn Tyr Tyr Asp Asp Glu Lys Glu Lys Leu Gln Ile Val
 245 250 255
 Glu Met Pro Leu Ala His Lys Leu Ser Ser Leu Ile Ile Leu Met Pro
 260 265 270
 His His Val Glu Pro Leu Glu Arg Leu Glu Lys Leu Leu Thr Lys Glu
 275 280 285
 Gln Leu Lys Ile Trp Met Gly Lys Met Gln Lys Lys Ala Val Ala Ile
 290 295 300
 Ser Leu Pro Lys Gly Val Val Glu Val Thr His Asp Leu Gln Lys His
 305 310 315 320
 Leu Ala Gly Leu Gly Leu Thr Glu Ala Ile Asp Lys Asn Lys Ala Asp
 325 330 335
 Leu Ser Arg Met Ser Gly Lys Lys Asp Leu Tyr Leu Ala Ser Val Phe
 340 345 350
 His Ala Thr Ala Phe Glu Leu Asp Thr Asp Gly Asn Pro Phe Asp Gln
 355 360 365
 Asp Ile Tyr Gly Arg Glu Glu Leu Arg Ser Pro Lys Leu Phe Tyr Ala
 370 375 380
 Asp His Pro Phe Ile Phe Leu Val Arg Asp Thr Gln Ser Gly Ser Leu
 385 390 395 400
 Leu Phe Ile Gly Arg Leu Val Arg Pro Lys Gly Asp Lys Met Arg Asp
 405 410 415
 Glu Leu

<210> 327
 <211> 314
 <212> PRT
 <213> Homo sapiens
 <400> 327

Met Asp Ala Phe Lys Gly Gly Met Ser Leu Glu Arg Leu Pro Glu Gly
 1 5 10 15
 Leu Arg Pro Pro Pro Pro Pro His Asp Met Gly Pro Ala Phe His
 20 25 30
 Leu Ala Arg Pro Ala Asp Pro Arg Glu Pro Leu Glu Asn Ser Ala Ser
 35 40 45
 Glu Ser Ser Asp Thr Glu Leu Pro Glu Lys Glu Arg Gly Gly Glu Pro
 50 55 60
 Lys Gly Pro Glu Asp Ser Gly Ala Gly Gly Thr Gly Cys Gly Gly Ala
 65 70 75 80
 Asp Asp Pro Ala Lys Lys Lys Lys Gln Arg Arg Gln Arg Thr His Phe
 85 90 95
 Thr Ser Gln Gln Leu Gln Glu Leu Glu Ala Thr Phe Gln Arg Asn Arg
 100 105 110
 Tyr Pro Asp Met Ser Met Arg Glu Glu Ile Ala Val Trp Thr Asn Leu
 115 120 125
 Thr Glu Pro Arg Val Arg Val Trp Phe Lys Asn Arg Arg Ala Lys Trp
 130 135 140
 Arg Lys Arg Glu Arg Asn Gln Gln Leu Asp Leu Cys Lys Gly Gly Tyr
 145 150 155 160
 Val Pro Gln Phe Ser Gly Leu Val Gln Pro Tyr Glu Asp Val Tyr Ala
 165 170 175
 Ala Gly Tyr Ser Tyr Asn Asn Trp Ala Ala Lys Ser Leu Ala Pro Ala
 180 185 190
 Pro Leu Ser Thr Lys Ser Phe Thr Phe Phe Asn Ser Met Ser Pro Leu
 195 200 205
 Ser Ser Gln Ser Met Phe Ser Ala Pro Ser Ser Ile Ser Ser Met Thr
 210 215 220
 Met Pro Ser Ser Met Gly Pro Gly Ala Val Pro Gly Met Pro Asn Ser
 225 230 235 240
 Gly Leu Asn Asn Ile Asn Asn Leu Thr Gly Ser Ser Leu Asn Ser Ala

245
 Met Ser Pro Gly Ala Cys Pro Tyr Gly Thr Pro Ala Ser Pro Tyr Ser
 260 265 270
 Val Tyr Arg Asp Thr Cys Asn Ser Ser Leu Ala Ser Leu Arg Leu Lys
 275 280 285
 Ser Lys Gln His Ser Ser Phe Gly Tyr Gly Ala Leu Gln Gly Pro Ala
 290 295 300
 Ser Gly Leu Asn Ala Cys Gln Tyr Asn Ser
 305 310

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 Met Pro Lys Arg Ala His Trp Gly Ala Leu Ser Val Val Leu Ile Leu
 1 5 10 15
 Leu Trp Gly His Pro Arg Val Ala Leu Ala Cys Pro His Pro Cys Ala
 20 25 30
 Cys Tyr Val Pro Ser Glu Val His Cys Thr Phe Arg Ser Leu Ala Ser
 35 40 45
 Val Pro Ala Gly Ile Ala Arg His Val Glu Arg Ile Asn Leu Gly Phe
 50 55 60
 Asn Ser Ile Gln Ala Leu Ser Glu Thr Ser Phe Ala Gly Leu Thr Lys
 65 70 75 80
 Leu Glu Leu Leu Met Ile His Gly Asn Glu Ile Pro Ser Ile Pro Asp
 85 90 95
 Gly Ala Leu Arg Asp Leu Ser Ser Leu Gln Val Phe Lys Phe Ser Tyr
 100 105 110
 Asn Lys Leu Arg Val Ile Thr Gly Gln Thr Leu Gln Gly Leu Ser Asn
 115 120 125
 Leu Met Arg Leu His Ile Asp His Asn Lys Ile Glu Phe Ile His Pro
 130 135 140
 Gln Ala Phe Asn Gly Leu Thr Ser Leu Arg Leu Leu His Leu Glu Gly
 145 150 155 160
 Asn Leu Leu His Gln Leu His Pro Ser Thr Phe Ser Thr Phe Thr Phe
 165 170 175
 Leu Asp Tyr Phe Arg Leu Ser Thr Ile Arg His Leu Tyr Leu Ala Glu
 180 185 190
 Asn Met Val Arg Thr Leu Pro Ala Ser Met Leu Arg Asn Met Pro Leu
 195 200 205
 Leu Glu Asn Leu Tyr Leu Gln Gly Asn Pro Trp Thr Cys Asp Cys Glu
 210 215 220
 Met Arg Trp Phe Leu Glu Trp Asp Ala Lys Ser Arg Gly Ile Leu Lys
 225 230 235 240
 Cys Lys Lys Asp Lys Ala Tyr Glu Gly Gly Gln Leu Cys Ala Met Cys
 245 250 255
 Phe Ser Pro Lys Lys Leu Tyr Lys His Glu Ile His Lys Leu Lys Asp
 260 265 270
 Met Thr Cys Leu Lys Pro Ser Ile Glu Ser Pro Leu Arg Gln Asn Arg
 275 280 285
 Ser Arg Ser Ile Glu Glu Glu Gln Glu Glu Glu Glu Asp Gly Gly Ser
 290 295 300
 Gln Leu Ile Leu Glu Lys Phe Gln Leu Pro Gln Trp Ser Ile Ser Leu
 305 310 315 320
 Asn Met Thr Asp Glu His Gly Asn Met Val Asn Leu Val Cys Asp Ile
 325 330 335
 Lys Lys Pro Met Asp Val Tyr Lys Ile His Leu Asn Gln Thr Asp Pro
 340 345 350
 Pro Asp Ile Asp Ile Asn Ala Thr Val Ala Leu Asp Phe Glu Cys Pro
 355 360 365
 Met Thr Arg Glu Asn Tyr Glu Lys Leu Trp Lys Leu Ile Ala Tyr Tyr
 370 375 380
 Ser Glu Val Pro Val Lys Leu His Arg Glu Leu Met Leu Ser Lys Asp
 385 390 395 400
 Pro Arg Val Ser Tyr Gln Tyr Arg Gln Asp Ala Asp Glu Glu Ala Leu
 405 410 415
 Tyr Tyr Thr Gly Val Arg Ala Gln Ile Leu Ala Glu Pro Glu Trp Val
 420 425 430

Met Gln Pro Ser Ile Asp Ile Gln Leu Asn Arg Arg Gln Ser Thr Ala
 435 440 445
 Lys Lys Val Leu Leu Ser Tyr Tyr Thr Gln Tyr Ser Gln Thr Ile Ser
 450 455 460
 Thr Lys Asp Thr Arg Gln Ala Arg Gly Arg Ser Trp Val Met Ile Glu
 465 470 475 480
 Pro Ser Gly Ala Val Gln Arg Asp Gln Thr Val Leu Glu Gly Gly Pro
 485 490 495
 Cys Gln Leu Ser Cys Asn Val Lys Ala Ser Glu Ser Pro Ser Ile Phe
 500 505 510
 Trp Val Leu Pro Asp Gly Ser Ile Leu Lys Ala Pro Met Asp Asp Pro
 515 520 525
 Asp Ser Lys Phe Ser Ile Leu Ser Ser Gly Trp Leu Arg Ile Lys Ser
 530 535 540
 Met Glu Pro Ser Asp Ser Gly Leu Tyr Gln Cys Ile Ala Gln Val Arg
 545 550 555 560
 Asp Glu Met Asp Arg Met Val Tyr Arg Val Leu Val Gln Ser Pro Ser
 565 570 575
 Thr Gln Pro Ala Glu Lys Asp Thr Val Thr Ile Gly Lys Asn Pro Gly
 580 585 590
 Glu Ser Val Thr Leu Pro Cys Asn Ala Leu Ala Ile Pro Glu Ala His
 595 600 605
 Leu Ser Trp Ile Leu Pro Asn Arg Arg Ile Ile Asn Asp Leu Ala Asn
 610 615 620
 Thr Ser His Val Tyr Met Leu Pro Asn Gly Thr Leu Ser Ile Pro Lys
 625 630 635 640
 Val Gln Val Ser Asp Ser Gly Tyr Tyr Arg Cys Val Ala Val Asn Gln
 645 650 655
 Gln Gly Ala Asp His Phe Thr Val Gly Ile Thr Val Thr Lys Lys Gly
 660 665 670
 Ser Gly Leu Pro Ser Lys Arg Gly Arg Arg Pro Gly Ala Lys Ala Leu
 675 680 685
 Ser Arg Val Arg Glu Asp Ile Val Glu Asp Glu Gly Gly Ser Gly Met
 690 695 700
 Gly Asp Glu Glu Asn Thr Ser Arg Arg Leu Leu His Pro Lys Asp Gln
 705 710 715 720
 Glu Val Phe Leu Lys Thr Lys Asp Asp Ala Ile Asn Gly Asp Lys Lys
 725 730 735
 Ala Lys Lys Gly Arg Arg Lys Leu Lys Leu Trp Lys His Ser Glu Lys
 740 745 750
 Glu Pro Glu Thr Asn Val Ala Glu Gly Arg Arg Val Phe Glu Ser Arg
 755 760 765
 Arg Arg Ile Asn Met Ala Asn Lys Gln Ile Asn Pro Glu Arg Trp Ala
 770 775 780
 Asp Ile Leu Ala Lys Val Arg Gly Lys Asn Leu Pro Lys Gly Thr Glu
 785 790 795 800
 Val Pro Pro Leu Ile Lys Thr Thr Ser Pro Pro Ser Leu Ser Leu Glu
 805 810 815
 Val Thr Pro Pro Phe Pro Ala Val Ser Pro Pro Ser Ala Ser Pro Val
 820 825 830
 Gln Thr Val Thr Ser Ala Glu Glu Ser Ser Ala Asp Val Pro Leu Leu
 835 840 845
 Gly Glu Glu Glu His Val Leu Gly Thr Ile Ser Ser Ala Ser Met Gly
 850 855 860
 Leu Glu His Asn His Asn Gly Val Ile Leu Val Glu Pro Glu Val Thr
 865 870 875 880
 Ser Thr Pro Leu Glu Glu Val Val Asp Asp Leu Ser Glu Lys Thr Glu
 885 890 895
 Glu Ile Thr Ser Thr Glu Gly Asp Leu Lys Gly Thr Ala Ala Pro Thr
 900 905 910
 Leu Ile Ser Glu Pro Tyr Glu Pro Ser Pro Thr Leu His Thr Leu Asp
 915 920 925
 Thr Val Tyr Glu Lys Pro Thr His Glu Glu Thr Ala Thr Glu Gly Trp
 930 935 940
 Ser Ala Ala Asp Val Gly Ser Ser Pro Glu Pro Thr Ser Ser Glu Tyr
 945 950 955 960
 Glu Pro Pro Leu Asp Ala Val Ser Leu Ala Glu Ser Glu Pro Met Gln
 965 970 975
 Tyr Phe Asp Pro Asp Leu Glu Thr Lys Ser Gln Pro Asp Glu Asp Lys

980					985					990					
Met	Lys	Glu	Asp	Thr	Phe	Ala	His	Leu	Thr	Pro	Thr	Pro	Thr	Ile	Trp
Val	Asn	Asp	Ser	Ser	Thr	Ser	Gln	Leu	Phe	Glu	Asp	Ser	Thr	Ile	
Gly	Glu	Pro	Gly	Val	Pro	Gly	Gln	Ser	His	Leu	Gln	Gly	Leu	Thr	
Asp	Asn	Ile	His	Leu	Val	Lys	Ser	Ser	Leu	Ser	Thr	Gln	Asp	Thr	
Leu	Leu	Ile	Lys	Lys	Gly	Met	Lys	Glu	Met	Ser	Gln	Thr	Leu	Gln	
Gly	Gly	Asn	Met	Leu	Glu	Gly	Asp	Pro	Thr	His	Ser	Arg	Ser	Ser	
Glu	Ser	Glu	Gly	Gln	Glu	Ser	Lys	Ser	Ile	Thr	Leu	Pro	Asp	Ser	
Thr	Leu	Gly	Ile	Met	Ser	Ser	Met	Ser	Pro	Val	Lys	Lys	Pro	Ala	
Glu	Thr	Thr	Val	Gly	Thr	Leu	Leu	Asp	Lys	Asp	Thr	Thr	Thr	Val	
Thr	Thr	Thr	Pro	Arg	Gln	Lys	Val	Ala	Pro	Ser	Ser	Thr	Met	Ser	
Thr	His	Pro	Ser	Arg	Arg	Arg	Pro	Asn	Gly	Arg	Arg	Arg	Leu	Arg	
Pro	Asn	Lys	Phe	Arg	His	Arg	His	Lys	Gln	Thr	Pro	Pro	Thr	Thr	
Phe	Ala	Pro	Ser	Glu	Thr	Phe	Ser	Thr	Gln	Pro	Thr	Gln	Ala	Pro	
Asp	Ile	Lys	Ile	Ser	Ser	Gln	Val	Glu	Ser	Ser	Leu	Val	Pro	Thr	
Ala	Trp	Val	Asp	Asn	Thr	Val	Asn	Thr	Pro	Lys	Gln	Leu	Glu	Met	
Glu	Lys	Asn	Ala	Glu	Pro	Thr	Ser	Lys	Gly	Thr	Pro	Arg	Arg	Lys	
His	Gly	Lys	Arg	Pro	Asn	Lys	His	Arg	Tyr	Thr	Pro	Ser	Thr	Val	
Ser	Ser	Arg	Ala	Ser	Gly	Ser	Lys	Pro	Ser	Pro	Ser	Pro	Glu	Asn	
Lys	His	Arg	Asn	Ile	Val	Thr	Pro	Ser	Ser	Glu	Thr	Ile	Leu	Leu	
Pro	Arg	Thr	Val	Ser	Leu	Lys	Thr	Glu	Gly	Pro	Tyr	Asp	Ser	Leu	
Asp	Tyr	Met	Thr	Thr	Thr	Arg	Lys	Ile	Tyr	Ser	Ser	Tyr	Pro	Lys	
Val	Gln	Glu	Thr	Leu	Pro	Val	Thr	Tyr	Lys	Pro	Thr	Ser	Asp	Gly	
Lys	Glu	Ile	Lys	Asp	Asp	Val	Ala	Thr	Asn	Val	Asp	Lys	His	Lys	
Ser	Asp	Ile	Leu	Val	Thr	Gly	Glu	Ser	Ile	Thr	Asn	Ala	Ile	Pro	
Thr	Ser	Arg	Ser	Leu	Val	Ser	Thr	Met	Gly	Glu	Phe	Lys	Glu	Glu	
Ser	Ser	Pro	Val	Gly	Phe	Pro	Gly	Thr	Pro	Thr	Trp	Asn	Pro	Ser	
Arg	Thr	Ala	Gln	Pro	Gly	Arg	Leu	Gln	Thr	Asp	Ile	Pro	Val	Thr	
Thr	Ser	Gly	Glu	Asn	Leu	Thr	Asp	Pro	Pro	Leu	Leu	Lys	Glu	Leu	
Glu	Asp	Val	Asp	Phe	Thr	Ser	Glu	Phe	Leu	Ser	Ser	Leu	Thr	Val	
Ser	Thr	Pro	Phe	His	Gln	Glu	Glu	Ala	Gly	Ser	Ser	Thr	Thr	Leu	
Ser	Ser	Ile	Lys	Val	Glu	Val	Ala	Ser	Ser	Gln	Ala	Glu	Thr	Thr	
Thr	Leu	Asp	Gln	Asp	His	Leu	Glu	Thr	Thr	Val	Ala	Ile	Leu	Leu	
Ser	Glu	Thr	Arg	Pro	Gln	Asn	His	Thr	Pro	Thr	Ala	Ala	Arg	Met	
Lys	Glu	Pro	Ala	Ser	Ser	Ser	Pro	Ser	Thr	Ile	Leu	Met	Ser	Leu	
	1490					1495					1500				

Gly	Gln	Thr	Thr	Thr	Thr	Lys	Pro	Ala	Leu	Pro	Ser	Pro	Arg	Ile
1505						1510					1515			
Ser	Gln	Ala	Ser	Arg	Asp	Ser	Lys	Glu	Asn	Val	Phe	Leu	Asn	Tyr
1520						1525					1530			
Val	Gly	Asn	Pro	Glu	Thr	Glu	Ala	Thr	Pro	Val	Asn	Asn	Glu	Gly
1535						1540					1545			
Thr	Gln	His	Met	Ser	Gly	Pro	Asn	Glu	Leu	Ser	Thr	Pro	Ser	Ser
1550						1555					1560			
Asp	Arg	Asp	Ala	Phe	Asn	Leu	Ser	Thr	Lys	Leu	Glu	Leu	Glu	Lys
1565						1570					1575			
Gln	Val	Phe	Gly	Ser	Arg	Ser	Leu	Pro	Arg	Gly	Pro	Asp	Ser	Gln
1580						1585					1590			
Arg	Gln	Asp	Gly	Arg	Val	His	Ala	Ser	His	Gln	Leu	Thr	Arg	Val
1595						1600					1605			
Pro	Ala	Lys	Pro	Ile	Leu	Pro	Thr	Ala	Thr	Val	Arg	Leu	Pro	Glu
1610						1615					1620			
Met	Ser	Thr	Gln	Ser	Ala	Ser	Arg	Tyr	Phe	Val	Thr	Ser	Gln	Ser
1625						1630					1635			
Pro	Arg	His	Trp	Thr	Asn	Lys	Pro	Glu	Ile	Thr	Thr	Tyr	Pro	Ser
1640						1645					1650			
Gly	Ala	Leu	Pro	Glu	Asn	Lys	Gln	Phe	Thr	Thr	Pro	Arg	Leu	Ser
1655						1660					1665			
Ser	Thr	Thr	Ile	Pro	Leu	Pro	Leu	His	Met	Ser	Lys	Pro	Ser	Ile
1670						1675					1680			
Pro	Ser	Lys	Phe	Thr	Asp	Arg	Arg	Thr	Asp	Gln	Phe	Asn	Gly	Tyr
1685						1690					1695			
Ser	Lys	Val	Phe	Gly	Asn	Asn	Asn	Ile	Pro	Glu	Ala	Arg	Asn	Pro
1700						1705					1710			
Val	Gly	Lys	Pro	Pro	Ser	Pro	Arg	Ile	Pro	His	Tyr	Ser	Asn	Gly
1715						1720					1725			
Arg	Leu	Pro	Phe	Phe	Thr	Asn	Lys	Thr	Leu	Ser	Phe	Pro	Gln	Leu
1730						1735					1740			
Gly	Val	Thr	Arg	Arg	Pro	Gln	Ile	Pro	Thr	Ser	Pro	Ala	Pro	Val
1745						1750					1755			
Met	Arg	Glu	Arg	Lys	Val	Ile	Pro	Gly	Ser	Tyr	Asn	Arg	Ile	His
1760						1765					1770			
Ser	His	Ser	Thr	Phe	His	Leu	Asp	Phe	Gly	Pro	Pro	Ala	Pro	Pro
1775						1780					1785			
Leu	Leu	His	Thr	Pro	Gln	Thr	Thr	Gly	Ser	Pro	Ser	Thr	Asn	Leu
1790						1795					1800			
Gln	Asn	Ile	Pro	Met	Val	Ser	Ser	Thr	Gln	Ser	Ser	Ile	Ser	Phe
1805						1810					1815			
Ile	Thr	Ser	Ser	Val	Gln	Ser	Ser	Gly	Ser	Phe	His	Gln	Ser	Ser
1820						1825					1830			
Ser	Lys	Phe	Phe	Ala	Gly	Gly	Pro	Pro	Ala	Ser	Lys	Phe	Trp	Ser
1835						1840					1845			
Leu	Gly	Glu	Lys	Pro	Gln	Ile	Leu	Thr	Lys	Ser	Pro	Gln	Thr	Val
1850						1855					1860			
Ser	Val	Thr	Ala	Glu	Thr	Asp	Thr	Val	Phe	Pro	Cys	Glu	Ala	Thr
1865						1870					1875			
Gly	Lys	Pro	Lys	Pro	Phe	Val	Thr	Trp	Thr	Lys	Val	Ser	Thr	Gly
1880						1885					1890			
Ala	Leu	Met	Thr	Pro	Asn	Thr	Arg	Ile	Gln	Arg	Phe	Glu	Val	Leu
1895						1900					1905			
Lys	Asn	Gly	Thr	Leu	Val	Ile	Arg	Lys	Val	Gln	Val	Gln	Asp	Arg
1910						1915					1920			
Gly	Gln	Tyr	Met	Cys	Thr	Ala	Ser	Asn	Leu	His	Gly	Leu	Asp	Arg
1925						1930					1935			
Met	Val	Val	Leu	Leu	Ser	Val	Thr	Val	Gln	Gln	Pro	Gln	Ile	Leu
1940						1945					1950			
Ala	Ser	His	Tyr	Gln	Asp	Val	Thr	Val	Tyr	Leu	Gly	Asp	Thr	Ile
1955						1960					1965			
Ala	Met	Glu	Cys	Leu	Ala	Lys	Gly	Thr	Pro	Ala	Pro	Gln	Ile	Ser
1970						1975					1980			
Trp	Ile	Phe	Pro	Asp	Arg	Arg	Val	Trp	Gln	Thr	Val	Ser	Pro	Val
1985						1990					1995			
Glu	Ser	Arg	Ile	Thr	Leu	His	Glu	Asn	Arg	Thr	Leu	Ser	Ile	Lys
2000						2005					2010			
Glu	Ala	Ser	Phe	Ser	Asp	Arg	Gly	Val	Tyr	Lys	Cys	Val	Ala	Ser

2015	2020	2025
Asn Ala Ala Gly Ala Asp	Ser Leu Ala Ile Arg	Leu His Val Ala
2030	2035	2040
Ala Leu Pro Pro Val Ile	His Gln Glu Lys Leu	Glu Asn Ile Ser
2045	2050	2055
Leu Pro Pro Gly Leu Ser	Ile His Ile His Cys	Thr Ala Lys Ala
2060	2065	2070
Ala Pro Leu Pro Ser Val	Arg Trp Val Leu Gly	Asp Gly Thr Gln
2075	2080	2085
Ile Arg Pro Ser Gln Phe	Leu His Gly Asn Leu	Phe Val Phe Pro
2090	2095	2100
Asn Gly Thr Leu Tyr Ile	Arg Asn Leu Ala Pro	Lys Asp Ser Gly
2105	2110	2115
Arg Tyr Glu Cys Val Ala	Ala Asn Leu Val Gly	Ser Ala Arg Arg
2120	2125	2130
Thr Val Gln Leu Asn Val	Gln Arg Ala Ala Ala	Asn Ala Arg Ile
2135	2140	2145
Thr Gly Thr Ser Pro Arg	Arg Thr Asp Val Arg	Tyr Gly Gly Thr
2150	2155	2160
Leu Lys Leu Asp Cys Ser	Ala Ser Gly Asp Pro	Trp Pro Arg Ile
2165	2170	2175
Leu Trp Arg Leu Pro Ser	Lys Arg Met Ile Asp	Ala Leu Phe Ser
2180	2185	2190
Phe Asp Ser Arg Ile Lys	Val Phe Ala Asn Gly	Thr Leu Val Val
2195	2200	2205
Lys Ser Val Thr Asp Lys	Asp Ala Gly Asp Tyr	Leu Cys Val Ala
2210	2215	2220
Arg Asn Lys Val Gly Asp	Asp Tyr Val Val Leu	Lys Val Asp Val
2225	2230	2235
Val Met Lys Pro Ala Lys	Ile Glu His Lys Glu	Glu Asn Asp His
2240	2245	2250
Lys Val Phe Tyr Gly Gly	Asp Leu Lys Val Asp	Cys Val Ala Thr
2255	2260	2265
Gly Leu Pro Asn Pro Glu	Ile Ser Trp Ser Leu	Pro Asp Gly Ser
2270	2275	2280
Leu Val Asn Ser Phe Met	Gln Ser Asp Asp Ser	Gly Gly Arg Thr
2285	2290	2295
Lys Arg Tyr Val Val Phe	Asn Asn Gly Thr Leu	Tyr Phe Asn Glu
2300	2305	2310
Val Gly Met Arg Glu Glu	Gly Asp Tyr Thr Cys	Phe Ala Glu Asn
2315	2320	2325
Gln Val Gly Lys Asp Glu	Met Arg Val Arg Val	Lys Val Val Thr
2330	2335	2340
Ala Pro Ala Thr Ile Arg	Asn Lys Thr Tyr Leu	Ala Val Gln Val
2345	2350	2355
Pro Tyr Gly Asp Val Val	Thr Val Ala Cys Glu	Ala Lys Gly Glu
2360	2365	2370
Pro Met Pro Lys Val Thr	Trp Leu Ser Pro Thr	Asn Lys Val Ile
2375	2380	2385
Pro Thr Ser Ser Glu Lys	Tyr Gln Ile Tyr Gln	Asp Gly Thr Leu
2390	2395	2400
Leu Ile Gln Lys Ala Gln	Arg Ser Asp Ser Gly	Asn Tyr Thr Cys
2405	2410	2415
Leu Val Arg Asn Ser Ala	Gly Glu Asp Arg Lys	Thr Val Trp Ile
2420	2425	2430
His Val Asn Val Gln Pro	Pro Lys Ile Asn Gly	Asn Pro Asn Pro
2435	2440	2445
Ile Thr Thr Val Arg Glu	Ile Ala Ala Gly Gly	Ser Arg Lys Leu
2450	2455	2460
Ile Asp Cys Lys Ala Glu	Gly Ile Pro Thr Pro	Arg Val Leu Trp
2465	2470	2475
Ala Phe Pro Glu Gly Val	Val Leu Pro Ala Pro	Tyr Tyr Gly Asn
2480	2485	2490
Arg Ile Thr Val His Gly	Asn Gly Ser Leu Asp	Ile Arg Ser Leu
2495	2500	2505
Arg Lys Ser Asp Ser Val	Gln Leu Val Cys Met	Ala Arg Asn Glu
2510	2515	2520
Gly Gly Glu Ala Arg Leu	Ile Val Gln Leu Thr	Val Leu Glu Pro
2525	2530	2535

Met	Glu	Lys	Pro	Ile	Phe	His	Asp	Pro	Ile	Ser	Glu	Lys	Ile	Thr
2540						2545					2550			
Ala	Met	Ala	Gly	His	Thr	Ile	Ser	Leu	Asn	Cys	Ser	Ala	Ala	Gly
2555						2560					2565			
Thr	Pro	Thr	Pro	Ser	Leu	Val	Trp	Val	Leu	Pro	Asn	Gly	Thr	Asp
2570						2575					2580			
Leu	Gln	Ser	Gly	Gln	Gln	Leu	Gln	Arg	Phe	Tyr	His	Lys	Ala	Asp
2585						2590					2595			
Gly	Met	Leu	His	Ile	Ser	Gly	Leu	Ser	Ser	Val	Asp	Ala	Gly	Ala
2600						2605					2610			
Tyr	Arg	Cys	Val	Ala	Arg	Asn	Ala	Ala	Gly	His	Thr	Glu	Arg	Leu
2615						2620					2625			
Val	Ser	Leu	Lys	Val	Gly	Leu	Lys	Pro	Glu	Ala	Asn	Lys	Gln	Tyr
2630						2635					2640			
His	Asn	Leu	Val	Ser	Ile	Ile	Asn	Gly	Glu	Thr	Leu	Lys	Leu	Pro
2645						2650					2655			
Cys	Thr	Pro	Pro	Gly	Ala	Gly	Gln	Gly	Arg	Phe	Ser	Trp	Thr	Leu
2660						2665					2670			
Pro	Asn	Gly	Met	His	Leu	Glu	Gly	Pro	Gln	Thr	Leu	Gly	Arg	Val
2675						2680					2685			
Ser	Leu	Leu	Asp	Asn	Gly	Thr	Leu	Thr	Val	Arg	Glu	Ala	Ser	Val
2690						2695					2700			
Phe	Asp	Arg	Gly	Thr	Tyr	Val	Cys	Arg	Met	Glu	Thr	Glu	Tyr	Gly
2705						2710					2715			
Pro	Ser	Val	Thr	Ser	Ile	Pro	Val	Ile	Val	Ile	Ala	Tyr	Pro	Pro
2720						2725					2730			
Arg	Ile	Thr	Ser	Glu	Pro	Thr	Pro	Val	Ile	Tyr	Thr	Arg	Pro	Gly
2735						2740					2745			
Asn	Thr	Val	Lys	Leu	Asn	Cys	Met	Ala	Met	Gly	Ile	Pro	Lys	Ala
2750						2755					2760			
Asp	Ile	Thr	Trp	Glu	Leu	Pro	Asp	Lys	Ser	His	Leu	Lys	Ala	Gly
2765						2770					2775			
Val	Gln	Ala	Arg	Leu	Tyr	Gly	Asn	Arg	Phe	Leu	His	Pro	Gln	Gly
2780						2785					2790			
Ser	Leu	Thr	Ile	Gln	His	Ala	Thr	Gln	Arg	Asp	Ala	Gly	Phe	Tyr
2795						2800					2805			
Lys	Cys	Met	Ala	Lys	Asn	Ile	Leu	Gly	Ser	Asp	Ser	Lys	Thr	Thr
2810						2815					2820			
Tyr	Ile	His	Val	Phe										
2825														

<210> 329

<211> 426

<212> PRT

<213> Homo sapiens

<400> 329

Met	Pro	Leu	Leu	Trp	Leu	Arg	Gly	Phe	Leu	Leu	Ala	Ser	Cys	Trp	Ile
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Ile	Val	Arg	Ser	Ser	Pro	Thr	Pro	Gly	Ser	Glu	Gly	His	Ser	Ala	Ala
			20					25					30		
Pro	Asp	Cys	Pro	Ser	Cys	Ala	Leu	Ala	Ala	Leu	Pro	Lys	Asp	Val	Pro
		35				40						45			
Asn	Ser	Gln	Pro	Glu	Met	Val	Glu	Ala	Val	Lys	Lys	His	Ile	Leu	Asn
		50				55					60				
Met	Leu	His	Leu	Lys	Lys	Arg	Pro	Asp	Val	Thr	Gln	Pro	Val	Pro	Lys
65				70				75						80	
Ala	Ala	Leu	Leu	Asn	Ala	Ile	Arg	Lys	Leu	His	Val	Gly	Lys	Val	Gly
			85					90					95		
Glu	Asn	Gly	Tyr	Val	Glu	Ile	Glu	Asp	Ile	Gly	Arg	Arg	Ala	Glu	
			100					105					110		
Met	Asn	Glu	Leu	Met	Glu	Gln	Thr	Ser	Glu	Ile	Ile	Thr	Phe	Ala	Glu
		115				120						125			
Ser	Gly	Thr	Ala	Arg	Lys	Thr	Leu	His	Phe	Glu	Ile	Ser	Lys	Glu	Gly
		130				135					140				
Ser	Asp	Leu	Ser	Val	Val	Glu	Arg	Ala	Glu	Val	Trp	Leu	Phe	Leu	Lys
145				150				155						160	
Val	Pro	Lys	Ala	Asn	Arg	Thr	Arg	Thr	Lys	Val	Thr	Ile	Arg	Leu	Phe
			165					170					175		
Gln	Gln	Gln	Lys	His	Pro	Gln	Gly	Ser	Leu	Asp	Thr	Gly	Glu	Glu	Ala

180
 Glu Glu Val Gly Leu Lys Gly Glu 185
 195 200
 Lys Val Val Asp Ala Arg Lys Ser Thr Trp His Val Phe Pro Val Ser
 210 215
 Ser Ser Ile Gln Arg Leu Leu Asp Gln Gly Lys Ser Ser Leu Asp Val
 225 230 235 240
 Arg Ile Ala Cys Glu Gln Cys Gln Glu Ser Gly Ala Ser Leu Val Leu
 245 250 255
 Leu Gly Lys Lys Lys Lys Glu Glu Glu Gly Glu Gly Lys Lys Lys
 260 265 270
 Gly Gly Gly Glu Gly Gly Ala Gly Ala Asp Glu Glu Lys Glu Gln Ser
 275 280 285
 His Arg Pro Phe Leu Met Leu Gln Ala Arg Gln Ser Glu Asp His Pro
 290 295 300
 His Arg Arg Arg Arg Arg Gly Leu Glu Cys Asp Gly Lys Val Asn Ile
 305 310 315 320
 Cys Cys Lys Lys Gln Phe Phe Val Ser Phe Lys Asp Ile Gly Trp Asn
 325 330 335
 Asp Trp Ile Ile Ala Pro Ser Gly Tyr His Ala Asn Tyr Cys Glu Gly
 340 345 350
 Glu Cys Pro Ser His Ile Ala Gly Thr Ser Gly Ser Ser Leu Ser Phe
 355 360 365
 His Ser Thr Val Ile Asn His Tyr Arg Met Arg Gly His Ser Pro Phe
 370 375 380
 Ala Asn Leu Lys Ser Cys Cys Val Pro Thr Lys Leu Arg Pro Met Ser
 385 390 395 400
 Met Leu Tyr Tyr Asp Asp Gly Gln Asn Ile Ile Lys Lys Asp Ile Gln
 405 410 415
 Asn Met Ile Val Glu Glu Cys Gly Cys Ser 425
 420

<210> 330
 <211> 6792
 <212> PRT
 <213> Homo sapiens
 <400> 330

Met Phe Ile Asn Ile Lys Ser Ile Leu Trp Met Cys Ser Thr Leu Ile
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 Val Thr His Ala Leu His Lys Val Lys Val Gly Lys Ser Pro Pro Val
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 Arg Gly Ser Leu Ser Gly Lys Val Ser Leu Pro Cys His Phe Ser Thr
 35 40 45
 Met Pro Thr Leu Pro Pro Ser Tyr Asn Thr Ser Glu Phe Leu Arg Ile
 50 55 60
 Lys Trp Ser Lys Ile Glu Val Asp Lys Asn Gly Lys Asp Leu Lys Glu
 65 70 75 80
 Thr Thr Val Leu Val Ala Gln Asn Gly Asn Ile Lys Ile Gly Gln Asp
 85 90 95
 Tyr Lys Gly Arg Val Ser Val Pro Thr His Pro Glu Ala Val Gly Asp
 100 105 110
 Ala Ser Leu Thr Val Val Lys Leu Ala Ser Asp Ala Gly Leu Tyr
 115 120 125
 Arg Cys Asp Val Met Tyr Gly Ile Glu Asp Thr Gln Asp Thr Val Ser
 130 135 140
 Leu Thr Val Asp Gly Val Phe His Tyr Arg Ala Ala Thr Ser Arg
 145 150 155 160
 Tyr Thr Leu Asn Phe Glu Ala Ala Gln Lys Ala Cys Leu Asp Val Gly
 165 170 175
 Ala Val Ile Ala Thr Pro Glu Gln Leu Phe Ala Ala Tyr Glu Asp Gly
 180 185 190
 Phe Glu Gln Cys Asp Ala Gly Trp Leu Ala Asp Gln Thr Val Arg Tyr
 195 200 205
 Pro Ile Arg Ala Pro Arg Val Gly Cys Tyr Gly Asp Lys Met Gly Lys
 210 215 220
 Ala Gly Val Arg Thr Tyr Gly Phe Arg Ser Pro Gln Glu Thr Tyr Asp
 225 230 235 240
 Val Tyr Cys Tyr Val Asp His Leu Asp Gly Asp Val Phe His Leu Thr
 245 250 255

Val	Pro	Ser	Lys	Phe	Thr	Phe	Glu	Glu	Ala	Ala	Lys	Glu	Cys	Glu	Asn
			260					265					270		
Gln	Asp	Ala	Arg	Leu	Ala	Thr	Val	Gly	Glu	Leu	Gln	Ala	Ala	Trp	Arg
		275					280					285			
Asn	Gly	Phe	Asp	Gln	Cys	Asp	Tyr	Gly	Trp	Leu	Ser	Asp	Ala	Ser	Val
	290					295					300				
Arg	His	Pro	Val	Thr	Val	Ala	Arg	Ala	Gln	Cys	Gly	Gly	Gly	Leu	Leu
305				310						315					320
Gly	Val	Arg	Thr	Leu	Tyr	Arg	Phe	Glu	Asn	Gln	Thr	Gly	Phe	Pro	Pro
				325					330					335	
Pro	Asp	Ser	Arg	Phe	Asp	Ala	Tyr	Cys	Phe	Lys	Pro	Lys	Glu	Ala	Thr
			340					345					350		
Thr	Ile	Asp	Leu	Ser	Ile	Leu	Ala	Glu	Thr	Ala	Ser	Pro	Ser	Leu	Ser
		355					360					365			
Lys	Glu	Pro	Gln	Met	Val	Ser	Asp	Arg	Thr	Thr	Pro	Ile	Ile	Pro	Leu
	370					375					380				
Val	Asp	Glu	Leu	Pro	Val	Ile	Pro	Thr	Glu	Phe	Pro	Pro	Val	Gly	Asn
385					390					395					400
Ile	Val	Ser	Phe	Glu	Gln	Lys	Ala	Thr	Val	Gln	Pro	Gln	Ala	Ile	Thr
			405						410					415	
Asp	Ser	Leu	Ala	Thr	Lys	Leu	Pro	Thr	Pro	Thr	Gly	Ser	Thr	Lys	Lys
		420						425					430		
Pro	Trp	Asp	Met	Asp	Asp	Tyr	Ser	Pro	Ser	Ala	Ser	Gly	Pro	Leu	Gly
		435				440						445			
Lys	Leu	Asp	Ile	Ser	Glu	Ile	Lys	Glu	Glu	Val	Leu	Gln	Ser	Thr	Thr
	450					455					460				
Gly	Val	Ser	His	Tyr	Ala	Thr	Asp	Ser	Trp	Asp	Gly	Val	Val	Glu	Asp
465				470						475					480
Lys	Gln	Thr	Gln	Glu	Ser	Val	Thr	Gln	Ile	Glu	Gln	Ile	Glu	Val	Gly
				485					490					495	
Pro	Leu	Val	Thr	Ser	Met	Glu	Ile	Leu	Lys	His	Ile	Pro	Ser	Lys	Glu
		500						505					510		
Phe	Pro	Val	Thr	Glu	Thr	Pro	Leu	Val	Thr	Ala	Arg	Met	Ile	Leu	Glu
		515					520					525			
Ser	Lys	Thr	Glu	Lys	Lys	Met	Val	Ser	Thr	Val	Ser	Glu	Leu	Val	Thr
	530					535					540				
Thr	Gly	His	Tyr	Gly	Phe	Thr	Leu	Gly	Glu	Glu	Asp	Asp	Glu	Asp	Arg
545				550						555					560
Thr	Leu	Thr	Val	Gly	Ser	Asp	Glu	Ser	Thr	Leu	Ile	Phe	Asp	Gln	Ile
				565					570					575	
Pro	Glu	Val	Ile	Thr	Val	Ser	Lys	Thr	Ser	Glu	Asp	Thr	Ile	His	Thr
		580						585					590		
His	Leu	Glu	Asp	Leu	Glu	Ser	Val	Ser	Ala	Ser	Thr	Thr	Val	Ser	Pro
	595						600					605			
Leu	Ile	Met	Pro	Asp	Asn	Asn	Gly	Ser	Ser	Met	Asp	Asp	Trp	Glu	Glu
	610					615					620				
Arg	Gln	Thr	Ser	Gly	Arg	Ile	Thr	Glu	Glu	Phe	Leu	Gly	Lys	Tyr	Leu
625				630						635					640
Ser	Thr	Thr	Pro	Phe	Pro	Ser	Gln	His	Arg	Thr	Glu	Ile	Glu	Leu	Phe
				645					650					655	
Pro	Tyr	Ser	Gly	Asp	Lys	Ile	Leu	Val	Glu	Gly	Ile	Ser	Thr	Val	Ile
		660					665						670		
Tyr	Pro	Ser	Leu	Gln	Thr	Glu	Met	Thr	His	Arg	Arg	Glu	Arg	Thr	Glu
		675					680					685			
Thr	Leu	Ile	Pro	Glu	Met	Arg	Thr	Asp	Thr	Tyr	Thr	Asp	Glu	Ile	Gln
	690					695					700				
Glu	Glu	Ile	Thr	Lys	Ser	Pro	Phe	Met	Gly	Lys	Thr	Glu	Glu	Glu	Val
705				710						715					720
Phe	Ser	Gly	Met	Lys	Leu	Ser	Thr	Ser	Leu	Ser	Glu	Pro	Ile	His	Val
				725					730					735	
Thr	Glu	Ser	Ser	Val	Glu	Met	Thr	Lys	Ser	Phe	Asp	Phe	Pro	Thr	Leu
		740					745						750		
Ile	Thr	Lys	Leu	Ser	Ala	Glu	Pro	Thr	Glu	Val	Arg	Asp	Met	Glu	Glu
		755					760					765			
Asp	Phe	Thr	Ala	Thr	Pro	Gly	Thr	Thr	Lys	Tyr	Asp	Glu	Asn	Ile	Thr
	770					775					780				
Thr	Val	Leu	Leu	Ala	His	Gly	Thr	Leu	Ser	Val	Glu	Ala	Ala	Thr	Val
785					790					795					800
Ser	Lys	Trp	Ser	Trp	Asp	Glu	Asp	Asn	Thr	Thr	Ser	Lys	Pro	Leu	Glu

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Asp	Leu	Ser	Val	Ile	Gly	His	Pro	Ile	Asp	Ser	Glu	Ser	Lys	Glu
1340						1345					1350			
Asp	Glu	Pro	Cys	Ser	Glu	Glu	Thr	Asp	Pro	Val	His	Asp	Leu	Met
1355						1360					1365			
Ala	Glu	Ile	Leu	Pro	Glu	Phe	Pro	Asp	Ile	Ile	Glu	Ile	Asp	Leu
1370						1375					1380			
Tyr	His	Ser	Glu	Glu	Asn	Glu	Glu	Glu	Glu	Glu	Glu	Cys	Ala	Asn
1385						1390					1395			
Ala	Thr	Asp	Val	Thr	Thr	Thr	Pro	Ser	Val	Gln	Tyr	Ile	Asn	Gly
1400						1405					1410			
Lys	His	Leu	Val	Thr	Thr	Val	Pro	Lys	Asp	Pro	Glu	Ala	Ala	Glu
1415						1420					1425			
Ala	Arg	Arg	Gly	Gln	Phe	Glu	Ser	Val	Ala	Pro	Ser	Gln	Asn	Phe
1430						1435					1440			
Ser	Asp	Ser	Ser	Glu	Ser	Asp	Thr	His	Pro	Phe	Val	Ile	Ala	Lys
1445						1450					1455			
Thr	Glu	Leu	Ser	Thr	Ala	Val	Gln	Pro	Asn	Glu	Ser	Thr	Glu	Thr
1460						1465					1470			
Thr	Glu	Ser	Leu	Glu	Val	Thr	Trp	Lys	Pro	Glu	Thr	Tyr	Pro	Glu
1475						1480					1485			
Thr	Ser	Glu	His	Phe	Ser	Gly	Gly	Glu	Pro	Asp	Val	Phe	Pro	Thr
1490						1495					1500			
Val	Pro	Phe	His	Glu	Glu	Phe	Glu	Ser	Gly	Thr	Ala	Lys	Lys	Gly
1505						1510					1515			
Ala	Glu	Ser	Val	Thr	Glu	Arg	Asp	Thr	Glu	Val	Gly	His	Gln	Ala
1520						1525					1530			
His	Glu	His	Thr	Glu	Pro	Val	Ser	Leu	Phe	Pro	Glu	Glu	Ser	Ser
1535						1540					1545			
Gly	Glu	Ile	Ala	Ile	Asp	Gln	Glu	Ser	Gln	Lys	Ile	Ala	Phe	Ala
1550						1555					1560			
Arg	Ala	Thr	Glu	Val	Thr	Phe	Gly	Glu	Glu	Val	Glu	Lys	Ser	Thr
1565						1570					1575			
Ser	Val	Thr	Tyr	Thr	Pro	Thr	Ile	Val	Pro	Ser	Ser	Ala	Ser	Ala
1580						1585					1590			
Tyr	Val	Ser	Glu	Glu	Glu	Ala	Val	Thr	Leu	Ile	Gly	Asn	Pro	Trp
1595						1600					1605			
Pro	Asp	Asp	Leu	Leu	Ser	Thr	Lys	Glu	Ser	Trp	Val	Glu	Ala	Thr
1610						1615					1620			
Pro	Arg	Gln	Val	Val	Glu	Leu	Ser	Gly	Ser	Ser	Ser	Ile	Pro	Ile
1625						1630					1635			
Thr	Glu	Gly	Ser	Gly	Glu	Ala	Glu	Glu	Asp	Glu	Asp	Thr	Met	Phe
1640						1645					1650			
Thr	Met	Val	Thr	Asp	Leu	Ser	Gln	Arg	Asn	Thr	Thr	Asp	Thr	Leu
1655						1660					1665			
Ile	Thr	Leu	Asp	Thr	Ser	Arg	Ile	Ile	Thr	Glu	Ser	Phe	Phe	Glu
1670						1675					1680			
Val	Pro	Ala	Thr	Thr	Ile	Tyr	Pro	Val	Ser	Glu	Gln	Pro	Ser	Ala
1685						1690					1695			
Lys	Val	Val	Pro	Thr	Lys	Phe	Val	Ser	Glu	Thr	Asp	Thr	Ser	Glu
1700						1705					1710			
Trp	Ile	Ser	Ser	Thr	Thr	Val	Glu	Glu	Lys	Lys	Arg	Lys	Glu	Glu
1715						1720					1725			
Glu	Gly	Thr	Thr	Gly	Thr	Ala	Ser	Thr	Phe	Glu	Val	Tyr	Ser	Ser
1730						1735					1740			
Thr	Gln	Arg	Ser	Asp	Gln	Leu	Ile	Leu	Pro	Phe	Glu	Leu	Glu	Ser
1745						1750					1755			
Pro	Asn	Val	Ala	Thr	Ser	Ser	Asp	Ser	Gly	Thr	Arg	Lys	Ser	Phe
1760						1765					1770			
Met	Ser	Leu	Thr	Thr	Pro	Thr	Gln	Ser	Glu	Arg	Glu	Met	Thr	Asp
1775						1780					1785			
Ser	Thr	Pro	Val	Phe	Thr	Glu	Thr	Asn	Thr	Leu	Glu	Asn	Leu	Gly
1790						1795					1800			
Ala	Gln	Thr	Thr	Glu	His	Ser	Ser	Ile	His	Gln	Pro	Gly	Val	Gln
1805						1810					1815			
Glu	Gly	Leu	Thr	Thr	Leu	Pro	Arg	Ser	Pro	Ala	Ser	Val	Phe	Met
1820						1825					1830			
Glu	Gln	Gly	Ser	Gly	Glu	Ala	Ala	Ala	Asp	Pro	Glu	Thr	Thr	Thr
1835						1840					1845			
Val	Ser	Ser	Phe	Ser	Leu	Asn	Val	Glu	Tyr	Ala	Ile	Gln	Ala	Glu

1850	Lys Glu Val Ala Gly Thr	1855	Leu Ser Pro His Val	1860	Glu Thr Thr Phe
1865	Ser Thr Glu Pro Thr Gly	1870	Leu Val Leu Ser Thr	1875	Val Met Asp Arg
1880	Val Val Ala Glu Asn Ile	1885	Thr Gln Thr Ser Arg	1890	Glu Ile Val Ile
1895	Ser Glu Arg Leu Gly Glu	1900	Pro Asn Tyr Gly Ala	1905	Glu Ile Arg Gly
1910	Phe Ser Thr Gly Phe Pro	1915	Leu Glu Glu Asp Phe	1920	Ser Gly Asp Phe
1925	Arg Glu Tyr Ser Thr Val	1930	Ser His Pro Ile Ala	1935	Lys Glu Glu Thr
1940	Val Met Met Glu Gly Ser	1945	Gly Asp Ala Ala Phe	1950	Arg Asp Thr Gln
1955	Thr Ser Pro Ser Thr Val	1960	Pro Thr Ser Val His	1965	Ile Ser His Ile
1970	Ser Asp Ser Glu Gly Pro	1975	Ser Ser Thr Met Val	1980	Ser Thr Ser Ala
1985	Phe Pro Trp Glu Glu Phe	1990	Thr Ser Ser Ala Glu	1995	Gly Ser Gly Glu
2000	Gln Leu Val Thr Val Ser	2005	Ser Ser Val Val Pro	2010	Val Leu Pro Ser
2015	Ala Val Gln Lys Phe Ser	2020	Gly Thr Ala Ser Ser	2025	Ile Ile Asp Glu
2030	Gly Leu Gly Glu Val Gly	2035	Thr Val Asn Glu Ile	2040	Asp Arg Arg Ser
2045	Thr Ile Leu Pro Thr Ala	2050	Glu Val Glu Gly Thr	2055	Lys Ala Pro Val
2060	Glu Lys Glu Glu Val Lys	2065	Val Ser Gly Thr Val	2070	Ser Thr Asn Phe
2075	Pro Gln Thr Ile Glu Pro	2080	Ala Lys Leu Trp Ser	2085	Arg Gln Glu Val
2090	Asn Pro Val Arg Gln Glu	2095	Ile Glu Ser Glu Thr	2100	Thr Ser Glu Glu
2105	Gln Ile Gln Glu Glu Lys	2110	Ser Phe Glu Ser Pro	2115	Gln Asn Ser Pro
2120	Ala Thr Glu Gln Thr Ile	2125	Phe Asp Ser Gln Thr	2130	Phe Thr Glu Thr
2135	Glu Leu Lys Thr Thr Asp	2140	Tyr Ser Val Leu Thr	2145	Thr Lys Lys Thr
2150	Tyr Ser Asp Asp Lys Glu	2155	Met Lys Glu Glu Asp	2160	Thr Ser Leu Val
2165	Asn Met Ser Thr Pro Asp	2170	Pro Asp Ala Asn Gly	2175	Leu Glu Ser Tyr
2180	Thr Thr Leu Pro Glu Ala	2185	Thr Glu Lys Ser His	2190	Phe Phe Leu Ala
2195	Thr Ala Leu Val Thr Glu	2200	Ser Ile Pro Ala Glu	2205	His Val Val Thr
2210	Asp Ser Pro Ile Lys Lys	2215	Glu Glu Ser Thr Lys	2220	His Phe Pro Lys
2225	Gly Met Arg Pro Thr Ile	2230	Gln Glu Ser Asp Thr	2235	Glu Leu Leu Phe
2240	Ser Gly Leu Gly Ser Gly	2245	Glu Glu Val Leu Pro	2250	Thr Leu Pro Thr
2255	Glu Ser Val Asn Phe Thr	2260	Glu Val Glu Gln Ile	2265	Asn Asn Thr Leu
2270	Tyr Pro His Thr Ser Gln	2275	Val Glu Ser Thr Ser	2280	Ser Asp Lys Ile
2285	Glu Asp Phe Asn Arg Met	2290	Glu Asn Val Ala Lys	2295	Glu Val Gly Pro
2300	Leu Val Ser Gln Thr Asp	2305	Ile Phe Glu Gly Ser	2310	Gly Ser Val Thr
2315	Ser Thr Thr Leu Ile Glu	2320	Ile Leu Ser Asp Thr	2325	Gly Ala Glu Gly
2330	Pro Thr Val Ala Pro Leu	2335	Pro Phe Ser Thr Asp	2340	Ile Gly His Pro
2345	Gln Asn Gln Thr Val Arg	2350	Trp Ala Glu Glu Ile	2355	Gln Thr Ser Arg
2360		2365		2370	

Pro	Gln	Thr	Ile	Thr	Glu	Gln	Asp	Ser	Asn	Lys	Asn	Ser	Ser	Thr
	2375					2380					2385			
Ala	Glu	Ile	Asn	Glu	Thr	Thr	Thr	Ser	Ser	Thr	Asp	Phe	Leu	Ala
	2390					2395					2400			
Arg	Ala	Tyr	Gly	Phe	Glu	Met	Ala	Lys	Glu	Phe	Val	Thr	Ser	Ala
	2405					2410					2415			
Pro	Lys	Pro	Ser	Asp	Leu	Tyr	Tyr	Glu	Pro	Ser	Gly	Glu	Gly	Ser
	2420					2425					2430			
Gly	Glu	Val	Asp	Ile	Val	Asp	Ser	Phe	His	Thr	Ser	Ala	Thr	Thr
	2435					2440					2445			
Gln	Ala	Thr	Arg	Gln	Glu	Ser	Ser	Thr	Thr	Phe	Val	Ser	Asp	Gly
	2450					2455					2460			
Ser	Leu	Glu	Lys	His	Pro	Glu	Val	Pro	Ser	Ala	Lys	Ala	Val	Thr
	2465					2470					2475			
Ala	Asp	Gly	Phe	Pro	Thr	Val	Ser	Val	Met	Leu	Pro	Leu	His	Ser
	2480					2485					2490			
Glu	Gln	Asn	Lys	Ser	Ser	Pro	Asp	Pro	Thr	Ser	Thr	Leu	Ser	Asn
	2495					2500					2505			
Thr	Val	Ser	Tyr	Glu	Arg	Ser	Thr	Asp	Gly	Ser	Phe	Gln	Asp	Arg
	2510					2515					2520			
Phe	Arg	Glu	Phe	Glu	Asp	Ser	Thr	Leu	Lys	Pro	Asn	Arg	Lys	Lys
	2525					2530					2535			
Pro	Thr	Glu	Asn	Ile	Ile	Ile	Asp	Leu	Asp	Lys	Glu	Asp	Lys	Asp
	2540					2545					2550			
Leu	Ile	Leu	Thr	Ile	Thr	Glu	Ser	Thr	Ile	Leu	Glu	Ile	Leu	Pro
	2555					2560					2565			
Glu	Leu	Thr	Ser	Asp	Lys	Asn	Thr	Ile	Ile	Asp	Ile	Asp	His	Thr
	2570					2575					2580			
Lys	Pro	Val	Tyr	Glu	Asp	Ile	Leu	Gly	Met	Gln	Thr	Asp	Ile	Asp
	2585					2590					2595			
Thr	Glu	Val	Pro	Ser	Glu	Pro	His	Asp	Ser	Asn	Asp	Glu	Ser	Asn
	2600					2605					2610			
Asp	Asp	Ser	Thr	Gln	Val	Gln	Glu	Ile	Tyr	Glu	Ala	Ala	Val	Asn
	2615					2620					2625			
Leu	Ser	Leu	Thr	Glu	Glu	Thr	Phe	Glu	Gly	Ser	Ala	Asp	Val	Leu
	2630					2635					2640			
Ala	Ser	Tyr	Thr	Gln	Ala	Thr	His	Asp	Glu	Ser	Met	Thr	Tyr	Glu
	2645					2650					2655			
Asp	Arg	Ser	Gln	Leu	Asp	His	Met	Gly	Phe	His	Phe	Thr	Thr	Gly
	2660					2665					2670			
Ile	Pro	Ala	Pro	Ser	Thr	Glu	Thr	Glu	Leu	Asp	Val	Leu	Leu	Pro
	2675					2680					2685			
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	2690					2695					2700			
Pro	Glu	Ile	Glu	Gly	Ile	Lys	Ala	Glu	Ala	Lys	Ala	Leu	Asp	Asp
	2705					2710					2715			
Met	Phe	Glu	Ser	Ser	Thr	Leu	Ser	Asp	Gly	Gln	Ala	Ile	Ala	Asp
	2720					2725					2730			
Gln	Ser	Glu	Ile	Ile	Pro	Thr	Leu	Gly	Gln	Phe	Glu	Arg	Thr	Gln
	2735					2740					2745			
Glu	Glu	Tyr	Glu	Asp	Lys	Lys	His	Ala	Gly	Pro	Ser	Phe	Gln	Pro
	2750					2755					2760			
Glu	Phe	Ser	Ser	Gly	Ala	Glu	Glu	Ala	Leu	Val	Asp	His	Thr	Pro
	2765					2770					2775			
Tyr	Leu	Ser	Ile	Ala	Thr	Thr	His	Leu	Met	Asp	Gln	Ser	Val	Thr
	2780					2785					2790			
Glu	Val	Pro	Asp	Val	Met	Glu	Gly	Ser	Asn	Pro	Pro	Tyr	Tyr	Thr
	2795					2800					2805			
Asp	Thr	Thr	Leu	Ala	Val	Ser	Thr	Phe	Ala	Lys	Leu	Ser	Ser	Gln
	2810					2815					2820			
Thr	Pro	Ser	Ser	Pro	Leu	Thr	Ile	Tyr	Ser	Gly	Ser	Glu	Ala	Ser
	2825					2830					2835			
Gly	His	Thr	Glu	Ile	Pro	Gln	Pro	Ser	Ala	Leu	Pro	Gly	Ile	Asp
	2840					2845					2850			
Val	Gly	Ser	Ser	Val	Met	Ser	Pro	Gln	Asp	Ser	Phe	Lys	Glu	Ile
	2855					2860					2865			
His	Val	Asn	Ile	Glu	Ala	Thr	Phe	Lys	Pro	Ser	Ser	Glu	Glu	Tyr
	2870					2875					2880			
Leu	His	Ile	Thr	Glu	Pro	Pro	Ser	Leu	Ser	Pro	Asp	Thr	Lys	Leu

2885	Glu Pro Ser Glu Asp Asp	2890	Gly Lys Pro Glu Leu	2895	Leu Glu Glu Met
2900	Glu Ala Ser Pro Thr Glu	2905	Ile Ala Val Glu	2910	Gly Thr Glu Ile
2915	Leu Gln Asp Phe Gln Asn	2920	Thr Asp Gly Gln	2925	Val Ser Gly Glu
2930	Ala Ile Lys Met Phe Pro	2935	Ile Lys Thr Pro	2940	Glu Ala Gly Thr
2945	Val Ile Thr Thr Ala Asp	2950	Ile Glu Leu Glu	2955	Gly Ala Thr Gln
2960	Trp Pro His Ser Thr Ser	2965	Ser Ala Thr Tyr	2970	Gly Val Glu Ala
2975	Gly Val Val Pro Trp Leu	2980	Pro Gln Thr Ser	2985	Glu Arg Pro Thr
2990	Leu Ser Ser Ser Pro Glu	2995	Ile Asn Pro Glu Thr	3000	Gln Ala Ala Leu
3005	Ile Arg Gly Gln Asp Ser	3010	Ile Ala Ala Ser	3015	Glu Gln Gln Val
3020	Ala Ala Arg Ile Leu Asp	3025	Ser Asn Asp Gln Ala	3030	Thr Val Asn Pro
3035	Val Glu Phe Asn Thr Glu	3040	Val Ala Thr Pro Pro	3045	Phe Ser Leu Leu
3050	Glu Thr Ser Asn Glu Thr	3055	Asp Phe Leu Ile Gly	3060	Ile Asn Glu Glu
3065	Ser Val Glu Gly Thr Ala	3070	Ile Tyr Leu Pro Gly	3075	Pro Asp Arg Cys
3080	Lys Met Asn Pro Cys Leu	3085	Asn Gly Gly Thr Cys	3090	Tyr Pro Thr Glu
3095	Thr Ser Tyr Val Cys Thr	3100	Val Pro Gly Tyr	3105	Ser Gly Asp Gln
3110	Cys Glu Leu Asp Phe Asp	3115	Glu Cys His Ser Asn	3120	Pro Cys Arg Asn
3125	Gly Ala Thr Cys Val Asp	3130	Gly Phe Asn Thr Phe	3135	Arg Cys Leu Cys
3140	Leu Pro Ser Tyr Val Gly	3145	Ala Leu Cys Glu Gln	3150	Asp Thr Glu Thr
3155	Cys Asp Tyr Gly Trp His	3160	Lys Phe Gln Gly Gln	3165	Cys Tyr Lys Tyr
3170	Phe Ala His Arg Arg Thr	3175	Trp Asp Ala Ala Glu	3180	Arg Glu Cys Arg
3185	Leu Gln Gly Ala His Leu	3190	Thr Ser Ile Leu Ser	3195	His Glu Glu Gln
3200	Met Phe Val Asn Arg Val	3205	Gly His Asp Tyr Gln	3210	Trp Ile Gly Leu
3215	Asn Asp Lys Met Phe Glu	3220	His Asp Phe Arg Trp	3225	Thr Asp Gly Ser
3230	Thr Leu Gln Tyr Glu Asn	3235	Trp Arg Pro Asn Gln	3240	Pro Asp Ser Phe
3245	Phe Ser Ala Gly Glu Asp	3250	Cys Val Val Ile Ile	3255	Trp His Glu Asn
3260	Gly Gln Trp Asn Asp Val	3265	Pro Cys Asn Tyr His	3270	Leu Thr Tyr Thr
3275	Cys Lys Lys Gly Thr Val	3280	Ala Cys Gly Gln Pro	3285	Pro Val Val Glu
3290	Asn Ala Lys Thr Phe Gly	3295	Lys Met Lys Pro Arg	3300	Tyr Glu Ile Asn
3305	Ser Leu Ile Arg Tyr His	3310	Cys Lys Asp Gly Phe	3315	Ile Gln Arg His
3320	Leu Pro Thr Ile Arg Cys	3325	Leu Gly Asn Gly Arg	3330	Trp Ala Ile Pro
3335	Lys Ile Thr Cys Met Asn	3340	Pro Ser Ala Tyr Gln	3345	Arg Thr Tyr Ser
3350	Met Lys Tyr Phe Lys Asn	3355	Ser Ser Ala Lys	3360	Asp Asn Ser Ile
3365	Asn Thr Ser Lys His Asp	3370	His Arg Trp Ser Arg	3375	Trp Trp Gln Glu
3380	Ser Arg Arg Met Phe Ile	3385	Asn Ile Lys Ser Ile	3390	Leu Trp Met Cys
3395		3400		3405	

Ser	Thr	Leu	Ile	Val	Thr	His	Ala	Leu	His	Lys	Val	Lys	Val	Gly
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Lys	Ser	Pro	Pro	Val	Arg	Gly	Ser	Leu	Ser	Gly	Lys	Val	Ser	Leu
3425						3430					3435			
Pro	Cys	His	Phe	Ser	Thr	Met	Pro	Thr	Leu	Pro	Pro	Ser	Tyr	Asn
3440						3445					3450			
Thr	Ser	Glu	Phe	Leu	Arg	Ile	Lys	Trp	Ser	Lys	Ile	Glu	Val	Asp
3455						3460					3465			
Lys	Asn	Gly	Lys	Asp	Leu	Lys	Glu	Thr	Thr	Val	Leu	Val	Ala	Gln
3470						3475					3480			
Asn	Gly	Asn	Ile	Lys	Ile	Gly	Gln	Asp	Tyr	Lys	Gly	Arg	Val	Ser
3485						3490					3495			
Val	Pro	Thr	His	Pro	Glu	Ala	Val	Gly	Asp	Ala	Ser	Leu	Thr	Val
3500						3505					3510			
Val	Lys	Leu	Leu	Ala	Ser	Asp	Ala	Gly	Leu	Tyr	Arg	Cys	Asp	Val
3515						3520					3525			
Met	Tyr	Gly	Ile	Glu	Asp	Thr	Gln	Asp	Thr	Val	Ser	Leu	Thr	Val
3530						3535					3540			
Asp	Gly	Val	Val	Phe	His	Tyr	Arg	Ala	Ala	Thr	Ser	Arg	Tyr	Thr
3545						3550					3555			
Leu	Asn	Phe	Glu	Ala	Ala	Gln	Lys	Ala	Cys	Leu	Asp	Val	Gly	Ala
3560						3565					3570			
Val	Ile	Ala	Thr	Pro	Glu	Gln	Leu	Phe	Ala	Ala	Tyr	Glu	Asp	Gly
3575						3580					3585			
Phe	Glu	Gln	Cys	Asp	Ala	Gly	Trp	Leu	Ala	Asp	Gln	Thr	Val	Arg
3590						3595					3600			
Tyr	Pro	Ile	Arg	Ala	Pro	Arg	Val	Gly	Cys	Tyr	Gly	Asp	Lys	Met
3605						3610					3615			
Gly	Lys	Ala	Gly	Val	Arg	Thr	Tyr	Gly	Phe	Arg	Ser	Pro	Gln	Glu
3620						3625					3630			
Thr	Tyr	Asp	Val	Tyr	Cys	Tyr	Val	Asp	His	Leu	Asp	Gly	Asp	Val
3635						3640					3645			
Phe	His	Leu	Thr	Val	Pro	Ser	Lys	Phe	Thr	Phe	Glu	Glu	Ala	Ala
3650						3655					3660			
Lys	Glu	Cys	Glu	Asn	Gln	Asp	Ala	Arg	Leu	Ala	Thr	Val	Gly	Glu
3665						3670					3675			
Leu	Gln	Ala	Ala	Trp	Arg	Asn	Gly	Phe	Asp	Gln	Cys	Asp	Tyr	Gly
3680						3685					3690			
Trp	Leu	Ser	Asp	Ala	Ser	Val	Arg	His	Pro	Val	Thr	Val	Ala	Arg
3695						3700					3705			
Ala	Gln	Cys	Gly	Gly	Gly	Leu	Leu	Gly	Val	Arg	Thr	Leu	Tyr	Arg
3710						3715					3720			
Phe	Glu	Asn	Gln	Thr	Gly	Phe	Pro	Pro	Pro	Asp	Ser	Arg	Phe	Asp
3725						3730					3735			
Ala	Tyr	Cys	Phe	Lys	Pro	Lys	Glu	Ala	Thr	Thr	Ile	Asp	Leu	Ser
3740						3745					3750			
Ile	Leu	Ala	Glu	Thr	Ala	Ser	Pro	Ser	Leu	Ser	Lys	Glu	Pro	Gln
3755						3760					3765			
Met	Val	Ser	Asp	Arg	Thr	Thr	Pro	Ile	Ile	Pro	Leu	Val	Asp	Glu
3770						3775					3780			
Leu	Pro	Val	Ile	Pro	Thr	Glu	Phe	Pro	Pro	Val	Gly	Asn	Ile	Val
3785						3790					3795			
Ser	Phe	Glu	Gln	Lys	Ala	Thr	Val	Gln	Pro	Gln	Ala	Ile	Thr	Asp
3800						3805					3810			
Ser	Leu	Ala	Thr	Lys	Leu	Pro	Thr	Pro	Thr	Gly	Ser	Thr	Lys	Lys
3815						3820					3825			
Pro	Trp	Asp	Met	Asp	Asp	Tyr	Ser	Pro	Ser	Ala	Ser	Gly	Pro	Leu
3830						3835					3840			
Gly	Lys	Leu	Asp	Ile	Ser	Glu	Ile	Lys	Glu	Glu	Val	Leu	Gln	Ser
3845						3850					3855			
Thr	Thr	Gly	Val	Ser	His	Tyr	Ala	Thr	Asp	Ser	Trp	Asp	Gly	Val
3860						3865					3870			
Val	Glu	Asp	Lys	Gln	Thr	Gln	Glu	Ser	Val	Thr	Gln	Ile	Glu	Gln
3875						3880					3885			
Ile	Glu	Val	Gly	Pro	Leu	Val	Thr	Ser	Met	Glu	Ile	Leu	Lys	His
3890						3895					3900			
Ile	Pro	Ser	Lys	Glu	Phe	Pro	Val	Thr	Glu	Thr	Pro	Leu	Val	Thr
3905						3910					3915			
Ala	Arg	Met	Ile	Leu	Glu	Ser	Lys	Thr	Glu	Lys	Lys	Met	Val	Ser

3920	Thr Val Ser Glu Leu Val	3925	Thr Thr Gly His Tyr	3930	Gly Phe Thr Leu
3935	Gly Glu Glu Asp Asp Glu	3940	Asp Arg Thr Leu Thr	3945	Val Gly Ser Asp
3950	Glu Ser Thr Leu Ile Phe	3955	Asp Gln Ile Pro Glu	3960	Val Ile Thr Val
3965	Ser Lys Thr Ser Glu Asp	3970	Thr Ile His Thr His	3975	Leu Glu Asp Leu
3980	Glu Ser Val Ser Ala Ser	3985	Thr Thr Val Ser Pro	3990	Leu Ile Met Pro
3995	Asp Asn Asn Gly Ser Ser	4000	Met Asp Asp Trp Glu	4005	Glu Arg Gln Thr
4010	Ser Gly Arg Ile Thr Glu	4015	Glu Phe Leu Gly Lys	4020	Tyr Leu Ser Thr
4025	Thr Pro Phe Pro Ser Gln	4030	His Arg Thr Glu Ile	4035	Glu Leu Phe Pro
4040	Tyr Ser Gly Asp Lys Ile	4045	Leu Val Glu Gly Ile	4050	Ser Thr Val Ile
4055	Tyr Pro Ser Leu Gln Thr	4060	Glu Met Thr His Arg	4065	Arg Glu Arg Thr
4070	Glu Thr Leu Ile Pro Glu	4075	Met Arg Thr Asp Thr	4080	Tyr Thr Asp Glu
4085	Ile Gln Glu Glu Ile Thr	4090	Lys Ser Pro Phe Met	4095	Gly Lys Thr Glu
4100	Glu Glu Val Phe Ser Gly	4105	Met Lys Leu Ser Thr	4110	Ser Leu Ser Glu
4115	Pro Ile His Val Thr Glu	4120	Ser Ser Val Glu Met	4125	Thr Lys Ser Phe
4130	Asp Phe Pro Thr Leu Ile	4135	Thr Lys Leu Ser Ala	4140	Glu Pro Thr Glu
4145	Val Arg Asp Met Glu Glu	4150	Asp Phe Thr Ala Thr	4155	Pro Gly Thr Thr
4160	Lys Tyr Asp Glu Asn Ile	4165	Thr Thr Val Leu Leu	4170	Ala His Gly Thr
4175	Leu Ser Val Glu Ala Ala	4180	Thr Val Ser Lys Trp	4185	Ser Trp Asp Glu
4190	Asp Asn Thr Thr Ser Lys	4195	Pro Leu Glu Ser Thr	4200	Glu Pro Ser Ala
4205	Ser Ser Lys Leu Pro Pro	4210	Ala Leu Leu Thr Thr	4215	Val Gly Met Asn
4220	Gly Lys Asp Lys Asp Ile	4225	Pro Ser Phe Thr Glu	4230	Asp Gly Ala Asp
4235	Glu Phe Thr Leu Ile Pro	4240	Asp Ser Thr Gln Lys	4245	Gln Leu Glu Glu
4250	Val Thr Asp Glu Asp Ile	4255	Ala Ala His Gly Lys	4260	Phe Thr Ile Arg
4265	Phe Gln Pro Thr Thr Ser	4270	Thr Gly Ile Ala Glu	4275	Lys Ser Thr Leu
4280	Arg Asp Ser Thr Thr Glu	4285	Glu Lys Val Pro Pro	4290	Ile Thr Ser Thr
4295	Glu Gly Gln Val Tyr Ala	4300	Thr Met Glu Gly Ser	4305	Ala Leu Gly Glu
4310	Val Glu Asp Val Asp Leu	4315	Ser Lys Pro Val Ser	4320	Thr Val Pro Gln
4325	Phe Ala His Thr Ser Glu	4330	Val Glu Gly Leu Ala	4335	Phe Val Ser Tyr
4340	Ser Ser Thr Gln Glu Pro	4345	Thr Thr Tyr Val Asp	4350	Ser Ser His Thr
4355	Ile Pro Leu Ser Val Ile	4360	Pro Lys Thr Asp Trp	4365	Gly Val Leu Val
4370	Pro Ser Val Pro Ser Glu	4375	Asp Glu Val Leu Gly	4380	Glu Pro Ser Gln
4385	Asp Ile Leu Val Ile Asp	4390	Gln Thr Arg Leu Glu	4395	Ala Thr Ile Ser
4400	Pro Glu Thr Met Arg Thr	4405	Thr Lys Ile Thr Glu	4410	Gly Thr Thr Gln
4415	Glu Glu Phe Pro Trp Lys	4420	Glu Gln Thr Ala Glu	4425	Lys Pro Val Pro
4430		4435		4440	

Ala Leu	Ser Ser Thr Ala	Trp	Thr Pro Lys Glu	Ala	Val Thr Pro
4445		4450		4455	
Leu Asp	Glu Gln Glu Gly	Asp	Gly Ser Ala Tyr	Thr	Val Ser Glu
4460		4465		4470	
Asp Glu	Leu Leu Thr Gly	Ser	Glu Arg Val Pro	Val	Leu Glu Thr
4475		4480		4485	
Thr Pro	Val Gly Lys Ile	Asp	His Ser Val Ser	Tyr	Pro Pro Gly
4490		4495		4500	
Ala Val	Thr Glu His Lys	Val	Lys Thr Asp Glu	Val	Val Thr Leu
4505		4510		4515	
Thr Pro	Arg Ile Gly Pro	Lys	Val Ser Leu Ser	Pro	Gly Pro Glu
4520		4525		4530	
Gln Lys	Tyr Glu Thr Glu	Gly	Ser Ser Thr Thr	Gly	Phe Thr Ser
4535		4540		4545	
Ser Leu	Ser Pro Phe Ser	Thr	His Ile Thr Gln	Leu	Met Glu Glu
4550		4555		4560	
Thr Thr	Thr Glu Lys Thr	Ser	Leu Glu Asp Ile	Asp	Leu Gly Ser
4565		4570		4575	
Gly Leu	Phe Glu Lys Pro	Lys	Ala Thr Glu Leu	Ile	Glu Phe Ser
4580		4585		4590	
Thr Ile	Lys Val Thr Val	Pro	Ser Asp Ile Thr	Thr	Ala Phe Ser
4595		4600		4605	
Ser Val	Asp Arg Leu His	Thr	Thr Ser Ala Phe	Lys	Pro Ser Ser
4610		4615		4620	
Ala Ile	Thr Lys Lys Pro	Pro	Leu Ile Asp Arg	Glu	Pro Gly Glu
4625		4630		4635	
Glu Thr	Thr Ser Asp Met	Val	Ile Ile Gly Glu	Ser	Thr Ser His
4640		4645		4650	
Val Pro	Pro Thr Thr Leu	Glu	Asp Ile Val Ala	Lys	Glu Thr Glu
4655		4660		4665	
Thr Asp	Ile Asp Arg Glu	Tyr	Phe Thr Thr Ser	Ser	Pro Pro Ala
4670		4675		4680	
Thr Gln	Pro Thr Arg Pro	Pro	Thr Val Glu Asp	Lys	Glu Ala Phe
4685		4690		4695	
Gly Pro	Gln Ala Leu Ser	Thr	Pro Gln Pro Pro	Ala	Ser Thr Lys
4700		4705		4710	
Phe His	Pro Asp Ile Asn	Val	Tyr Ile Ile Glu	Val	Arg Glu Asn
4715		4720		4725	
Lys Thr	Gly Arg Met Ser	Asp	Leu Ser Val Ile	Gly	His Pro Ile
4730		4735		4740	
Asp Ser	Glu Ser Lys Glu	Asp	Glu Pro Cys Ser	Glu	Glu Thr Asp
4745		4750		4755	
Pro Val	His Asp Leu Met	Ala	Glu Ile Leu Pro	Glu	Phe Pro Asp
4760		4765		4770	
Ile Ile	Glu Ile Asp Leu	Tyr	His Ser Glu Glu	Asn	Glu Glu Glu
4775		4780		4785	
Glu Glu	Glu Cys Ala Asn	Ala	Thr Asp Val Thr	Thr	Thr Pro Ser
4790		4795		4800	
Val Gln	Tyr Ile Asn Gly	Lys	His Leu Val Thr	Thr	Val Pro Lys
4805		4810		4815	
Asp Pro	Glu Ala Ala Glu	Ala	Arg Arg Gly Gln	Phe	Glu Ser Val
4820		4825		4830	
Ala Pro	Ser Gln Asn Phe	Ser	Asp Ser Ser Glu	Ser	Asp Thr His
4835		4840		4845	
Pro Phe	Val Ile Ala Lys	Thr	Glu Leu Ser Thr	Ala	Val Gln Pro
4850		4855		4860	
Asn Glu	Ser Thr Glu Thr	Thr	Glu Ser Leu Glu	Val	Thr Trp Lys
4865		4870		4875	
Pro Glu	Thr Tyr Pro Glu	Thr	Ser Glu His Phe	Ser	Gly Gly Glu
4880		4885		4890	
Pro Asp	Val Phe Pro Thr	Val	Pro Phe His Glu	Glu	Phe Glu Ser
4895		4900		4905	
Gly Thr	Ala Lys Lys Gly	Ala	Glu Ser Val Thr	Glu	Arg Asp Thr
4910		4915		4920	
Glu Val	Gly His Gln Ala	His	Glu His Thr Glu	Pro	Val Ser Leu
4925		4930		4935	
Phe Pro	Glu Glu Ser Ser	Gly	Glu Ile Ala Ile	Asp	Gln Glu Ser
4940		4945		4950	
Gln Lys	Ile Ala Phe Ala	Arg	Ala Thr Glu Val	Thr	Phe Gly Glu

4955	Glu Val	Glu Lys Ser Thr	4960	Ser Val Thr Tyr Thr	4965	Pro Thr Ile Val
4970	Pro Ser	Ser Ala Ser Ala	4975	Val Ser Glu Glu	4980	Glu Ala Val Thr
4985	Leu Ile	Gly Asn Pro Trp	4990	Pro Asp Asp Leu Leu	4995	Ser Thr Lys Glu
5000	Ser Trp	Val Glu Ala Thr	5005	Pro Arg Gln Val Val	5010	Glu Leu Ser Gly
5015	Ser Ser	Ser Ile Pro Ile	5020	Glu Gly Ser Gly	5025	Glu Ala Glu Glu
5030	Asp Glu	Asp Thr Met Phe	5035	Thr Met Val Thr Asp	5040	Leu Ser Gln Arg
5045	Asn Thr	Thr Asp Thr Leu	5050	Ile Thr Leu Asp Thr	5055	Ser Arg Ile Ile
5060	Thr Glu	Ser Phe Phe Glu	5065	Val Pro Ala Thr Thr	5070	Ile Tyr Pro Val
5075	Ser Glu	Gln Pro Ser Ala	5080	Lys Val Val Pro Thr	5085	Lys Phe Val Ser
5090	Glu Thr	Asp Thr Ser Glu	5095	Trp Ile Ser Ser Thr	5100	Thr Val Glu Glu
5105	Lys Lys	Arg Lys Glu Glu	5110	Glu Gly Thr Thr Gly	5115	Thr Ala Ser Thr
5120	Phe Glu	Val Tyr Ser Ser	5125	Thr Gln Arg Ser Asp	5130	Gln Leu Ile Leu
5135	Pro Phe	Glu Leu Glu Ser	5140	Pro Asn Val Ala Thr	5145	Ser Ser Asp Ser
5150	Gly Thr	Arg Lys Ser Phe	5155	Met Ser Leu Thr Thr	5160	Pro Thr Gln Ser
5165	Glu Arg	Glu Met Thr Asp	5170	Ser Thr Pro Val Phe	5175	Thr Glu Thr Asn
5180	Thr Leu	Glu Asn Leu Gly	5185	Ala Gln Thr Thr Glu	5190	His Ser Ser Ile
5195	His Gln	Pro Gly Val Gln	5200	Glu Gly Leu Thr Thr	5205	Leu Pro Arg Ser
5210	Pro Ala	Ser Val Phe Met	5215	Glu Gln Gly Ser Gly	5220	Glu Ala Ala Ala
5225	Asp Pro	Glu Thr Thr Thr	5230	Val Ser Ser Phe Ser	5235	Leu Asn Val Glu
5240	Tyr Ala	Ile Gln Ala Glu	5245	Lys Glu Val Ala Gly	5250	Thr Leu Ser Pro
5255	His Val	Glu Thr Thr Phe	5260	Ser Thr Glu Pro Thr	5265	Gly Leu Val Leu
5270	Ser Thr	Val Met Asp Arg	5275	Val Val Ala Glu Asn	5280	Ile Thr Gln Thr
5285	Ser Arg	Glu Ile Val Ile	5290	Ser Glu Arg Leu Gly	5295	Glu Pro Asn Tyr
5300	Gly Ala	Glu Ile Arg Gly	5305	Phe Ser Thr Gly Phe	5310	Pro Leu Glu Glu
5315	Asp Phe	Ser Gly Asp Phe	5320	Arg Glu Tyr Ser Thr	5325	Val Ser His Pro
5330	Ile Ala	Lys Glu Glu Thr	5335	Val Met Met Glu Gly	5340	Ser Gly Asp Ala
5345	Ala Phe	Arg Asp Thr Gln	5350	Thr Ser Pro Ser Thr	5355	Val Pro Thr Ser
5360	Val His	Ile Ser His Ile	5365	Ser Asp Ser Glu Gly	5370	Pro Ser Ser Thr
5375	Met Val	Ser Thr Ser Ala	5380	Phe Pro Trp Glu Glu	5385	Phe Thr Ser Ser
5390	Ala Glu	Gly Ser Gly Glu	5395	Gln Leu Val Thr Val	5400	Ser Ser Ser Val
5405	Val Pro	Val Leu Pro Ser	5410	Ala Val Gln Lys Phe	5415	Ser Gly Thr Ala
5420	Ser Ser	Ile Ile Asp Glu	5425	Gly Leu Gly Glu Val	5430	Gly Thr Val Asn
5435	Glu Ile	Asp Arg Arg Ser	5440	Thr Ile Leu Pro Thr	5445	Ala Glu Val Glu
5450	Gly Thr	Lys Ala Pro Val	5455	Glu Lys Glu Glu Val	5460	Lys Val Ser Gly
5465			5470		5475	

Thr Val	Ser Thr Asn Phe	Pro	Gln Thr Ile Glu	Pro	Ala Lys Leu
5480		5485		5490	
Trp Ser	Arg Gln Glu Val	Asn	Pro Val Arg Gln	Glu	Ile Glu Ser
5495		5500		5505	
Glu Thr	Thr Ser Glu Glu	Gln	Ile Gln Glu Glu	Lys	Ser Phe Glu
5510		5515		5520	
Ser Pro	Gln Asn Ser Pro	Ala	Thr Glu Gln Thr	Ile	Phe Asp Ser
5525		5530		5535	
Gln Thr	Phe Thr Glu Thr	Glu	Leu Lys Thr Thr	Asp	Tyr Ser Val
5540		5545		5550	
Leu Thr	Thr Lys Lys Thr	Tyr	Ser Asp Asp Lys	Glu	Met Lys Glu
5555		5560		5565	
Glu Asp	Thr Ser Leu Val	Asn	Met Ser Thr Pro	Asp	Pro Asp Ala
5570		5575		5580	
Asn Gly	Leu Glu Ser Tyr	Thr	Thr Leu Pro Glu	Ala	Thr Glu Lys
5585		5590		5595	
Ser His	Phe Phe Leu Ala	Thr	Ala Leu Val Thr	Glu	Ser Ile Pro
5600		5605		5610	
Ala Glu	His Val Val Thr	Asp	Ser Pro Ile Lys	Lys	Glu Glu Ser
5615		5620		5625	
Thr Lys	His Phe Pro Lys	Gly	Met Arg Pro Thr	Ile	Gln Glu Ser
5630		5635		5640	
Asp Thr	Glu Leu Leu Phe	Ser	Gly Leu Gly Ser	Gly	Glu Glu Val
5645		5650		5655	
Leu Pro	Thr Leu Pro Thr	Glu	Ser Val Asn Phe	Thr	Glu Val Glu
5660		5665		5670	
Gln Ile	Asn Asn Thr Leu	Tyr	Pro His Thr Ser	Gln	Val Glu Ser
5675		5680		5685	
Thr Ser	Ser Asp Lys Ile	Glu	Asp Phe Asn Arg	Met	Glu Asn Val
5690		5695		5700	
Ala Lys	Glu Val Gly Pro	Leu	Val Ser Gln Thr	Asp	Ile Phe Glu
5705		5710		5715	
Gly Ser	Gly Ser Val Thr	Ser	Thr Thr Leu Ile	Glu	Ile Leu Ser
5720		5725		5730	
Asp Thr	Gly Ala Glu Gly	Pro	Thr Val Ala Pro	Leu	Pro Phe Ser
5735		5740		5745	
Thr Asp	Ile Gly His Pro	Gln	Asn Gln Thr Val	Arg	Trp Ala Glu
5750		5755		5760	
Glu Ile	Gln Thr Ser Arg	Pro	Gln Thr Ile Thr	Glu	Gln Asp Ser
5765		5770		5775	
Asn Lys	Asn Ser Ser Thr	Ala	Glu Ile Asn Glu	Thr	Thr Thr Ser
5780		5785		5790	
Ser Thr	Asp Phe Leu Ala	Arg	Ala Tyr Gly Phe	Glu	Met Ala Lys
5795		5800		5805	
Glu Phe	Val Thr Ser Ala	Pro	Lys Pro Ser Asp	Leu	Tyr Tyr Glu
5810		5815		5820	
Pro Ser	Gly Glu Gly Ser	Gly	Glu Val Asp Ile	Val	Asp Ser Phe
5825		5830		5835	
His Thr	Ser Ala Thr Thr	Gln	Ala Thr Arg Gln	Glu	Ser Ser Thr
5840		5845		5850	
Thr Phe	Val Ser Asp Gly	Ser	Leu Glu Lys His	Pro	Glu Val Pro
5855		5860		5865	
Ser Ala	Lys Ala Val Thr	Ala	Asp Gly Phe Pro	Thr	Val Ser Val
5870		5875		5880	
Met Leu	Pro Leu His Ser	Glu	Gln Asn Lys Ser	Ser	Pro Asp Pro
5885		5890		5895	
Thr Ser	Thr Leu Ser Asn	Thr	Val Ser Tyr Glu	Arg	Ser Thr Asp
5900		5905		5910	
Gly Ser	Phe Gln Asp Arg	Phe	Arg Glu Phe Glu	Asp	Ser Thr Leu
5915		5920		5925	
Lys Pro	Asn Arg Lys Lys	Pro	Thr Glu Asn Ile	Ile	Ile Asp Leu
5930		5935		5940	
Asp Lys	Glu Asp Lys Asp	Leu	Ile Leu Thr Ile	Thr	Glu Ser Thr
5945		5950		5955	
Ile Leu	Glu Ile Leu Pro	Glu	Leu Thr Ser Asp	Lys	Asn Thr Ile
5960		5965		5970	
Ile Asp	Ile Asp His Thr	Lys	Pro Val Tyr Glu	Asp	Ile Leu Gly
5975		5980		5985	
Met Gln	Thr Asp Ile Asp	Thr	Glu Val Pro Ser	Glu	Pro His Asp

5990	Ser Asn Asp Glu Ser Asn	5995	Asp Ser Thr Gln Val	6000	Gln Glu Ile
6005	Tyr Glu Ala Ala Val Asn	6010	Ser Leu Thr Glu Glu	6015	Thr Phe Glu
6020	Gly Ser Ala Asp Val Leu	6025	Ser Tyr Thr Gln Ala	6030	Thr His Asp
6035	Glu Ser Met Thr Tyr Glu	6040	Arg Ser Gln Leu Asp	6045	His Met Gly
6050	Phe His Phe Thr Thr Gly	6055	Pro Ala Pro Ser Thr	6060	Glu Thr Glu
6065	Leu Asp Val Leu Leu Pro	6070	Ala Thr Ser Leu Pro	6075	Ile Pro Arg
6080	Lys Ser Ala Thr Val Ile	6085	Glu Ile Glu Gly Ile	6090	Lys Ala Glu
6095	Ala Lys Ala Leu Asp Asp	6100	Phe Glu Ser Ser Thr	6105	Leu Ser Asp
6110	Gly Gln Ala Ile Ala Asp	6115	Ser Glu Ile Ile Pro	6120	Thr Leu Gly
6125	Gln Phe Glu Arg Thr Gln	6130	Glu Tyr Glu Asp Lys	6135	Lys His Ala
6140	Gly Pro Ser Phe Gln Pro	6145	Phe Ser Ser Gly Ala	6150	Glu Glu Ala
6155	Leu Val Asp His Thr Pro	6160	Leu Ser Ile Ala Thr	6165	Thr His Leu
6170	Met Asp Gln Ser Val Thr	6175	Val Pro Asp Val Met	6180	Glu Gly Ser
6185	Asn Pro Pro Tyr Tyr Thr	6190	Thr Thr Leu Ala Val	6195	Ser Thr Phe
6200	Ala Lys Leu Ser Ser Gln	6205	Pro Ser Ser Pro Leu	6210	Thr Ile Tyr
6215	Ser Gly Ser Glu Ala Ser	6220	His Thr Glu Ile Pro	6225	Gln Pro Ser
6230	Ala Leu Pro Gly Ile Asp	6235	Gly Ser Ser Val Met	6240	Ser Pro Gln
6245	Asp Ser Phe Lys Glu Ile	6250	Val Asn Ile Glu Ala	6255	Thr Phe Lys
6260	Pro Ser Ser Glu Glu Tyr	6265	His Ile Thr Glu Pro	6270	Pro Ser Leu
6275	Ser Pro Asp Thr Lys Leu	6280	Pro Ser Glu Asp Asp	6285	Gly Lys Pro
6290	Glu Leu Leu Glu Glu Met	6295	Ala Ser Pro Thr Glu	6300	Leu Ile Ala
6305	Val Glu Gly Thr Glu Ile	6310	Gln Asp Phe Gln Asn	6315	Lys Thr Asp
6320	Gly Gln Val Ser Gly Glu	6325	Ile Lys Met Phe Pro	6330	Thr Ile Lys
6335	Thr Pro Glu Ala Gly Thr	6340	Ile Thr Thr Ala Asp	6345	Glu Ile Glu
6350	Leu Glu Gly Ala Thr Gln	6355	Pro His Ser Thr Ser	6360	Ala Ser Ala
6365	Thr Tyr Gly Val Glu Ala	6370	Val Val Pro Trp Leu	6375	Ser Pro Gln
6380	Thr Ser Glu Arg Pro Thr	6385	Ser Ser Ser Pro Glu	6390	Ile Asn Pro
6395	Glu Thr Gln Ala Ala Leu	6400	Arg Gly Gln Asp Ser	6405	Thr Ile Ala
6410	Ala Ser Glu Gln Gln Val	6415	Ala Arg Ile Leu Asp	6420	Ser Asn Asp
6425	Gln Ala Thr Val Asn Pro	6430	Glu Phe Asn Thr Glu	6435	Val Ala Thr
6440	Pro Pro Phe Ser Leu Leu	6445	Thr Ser Asn Glu Thr	6450	Asp Phe Leu
6455	Ile Gly Ile Asn Glu Glu	6460	Val Glu Gly Thr Ala	6465	Ile Tyr Leu
6470	Pro Gly Pro Asp Arg Cys	6475	Met Asn Pro Cys Leu	6480	Asn Gly Gly
6485	Thr Cys Tyr Pro Thr Glu	6490	Ser Tyr Val Cys Thr	6495	Cys Val Pro
6500		6505		6510	

Gly Tyr	Ser Gly Asp Gln Cys	Glu Leu Asp Phe Asp	Glu Cys His
6515	6520	6525	
Ser Asn	Pro Cys Arg Asn Gly	Ala Thr Cys Val Asp	Gly Phe Asn
6530	6535	6540	
Thr Phe	Arg Cys Leu Cys Leu	Pro Ser Tyr Val Gly	Ala Leu Cys
6545	6550	6555	
Glu Gln	Asp Thr Glu Thr Cys	Asp Tyr Gly Trp His	Lys Phe Gln
6560	6565	6570	
Gly Gln	Cys Tyr Lys Tyr Phe	Ala His Arg Arg Thr	Trp Asp Ala
6575	6580	6585	
Ala Glu	Arg Glu Cys Arg Leu	Gln Gly Ala His Leu	Thr Ser Ile
6590	6595	6600	
Leu Ser	His Glu Glu Gln Met	Phe Val Asn Arg Val	Gly His Asp
6605	6610	6615	
Tyr Gln	Trp Ile Gly Leu Asn	Asp Lys Met Phe Glu	His Asp Phe
6620	6625	6630	
Arg Trp	Thr Asp Gly Ser Thr	Leu Gln Tyr Glu Asn	Trp Arg Pro
6635	6640	6645	
Asn Gln	Pro Asp Ser Phe Phe	Ser Ala Gly Glu Asp	Cys Val Val
6650	6655	6660	
Ile Ile	Trp His Glu Asn Gly	Gln Trp Asn Asp Val	Pro Cys Asn
6665	6670	6675	
Tyr His	Leu Thr Tyr Thr Cys	Lys Lys Gly Thr Val	Ala Cys Gly
6680	6685	6690	
Gln Pro	Pro Val Val Glu Asn	Ala Lys Thr Phe Gly	Lys Met Lys
6695	6700	6705	
Pro Arg	Tyr Glu Ile Asn Ser	Leu Ile Arg Tyr His	Cys Lys Asp
6710	6715	6720	
Gly Phe	Ile Gln Arg His Leu	Pro Thr Ile Arg Cys	Leu Gly Asn
6725	6730	6735	
Gly Arg	Trp Ala Ile Pro Lys	Ile Thr Cys Met Asn	Pro Ser Ala
6740	6745	6750	
Tyr Gln	Arg Thr Tyr Ser Met	Lys Tyr Phe Lys Asn	Ser Ser Ser
6755	6760	6765	
Ala Lys	Asp Asn Ser Ile Asn	Thr Ser Lys His Asp	His Arg Trp
6770	6775	6780	
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<212> DNA

<213> Homo sapiens

<400> 473

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<211> 2790

<212> DNA

<213> Homo sapiens

<400> 474

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<211> 1504

<212> DNA

<213> Homo sapiens

<400> 475

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<212> DNA

<213> Homo sapiens

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<211> 2796

<212> DNA

<213> Homo sapiens

<400> 477

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<211> 2984

<212> DNA

<213> Homo sapiens

<400> 478

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<211> 1712

<212> DNA

<213> Homo sapiens

<400> 479

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<211> 2175

<212> DNA

<213> Homo sapiens

<400> 480

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<211> 1805

<212> DNA

<213> Homo sapiens

<400> 481

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<211> 895

<212> DNA

<213> Homo sapiens

<400> 482

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<210> 483

<211> 9432

<212> DNA

<213> Homo sapiens

<400> 483

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<210> 489

<211> 3263

<212> DNA

<213> Homo sapiens

<400> 489

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<210> 490

<211> 3197

<212> DNA

<213> Homo sapiens

<400> 490

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<210> 491

<211> 1646

<212> DNA

<213> Homo sapiens

<400> 491

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<210> 492

<211> 158

<212> PRT

<213> Homo sapiens

<400> 492

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Ala Arg Tyr Gln Trp Val Arg Cys Asn Pro Asp Ser Asn Ser Ala Asn
35     40     45
Cys Leu Glu Glu Lys Gly Pro Met Phe Glu Leu Leu Pro Gly Glu Ser
50     55     60
Asn Lys Ile Pro Arg Leu Arg Thr Asp Leu Phe Pro Lys Thr Arg Ile
65     70     75     80
Gln Asp Leu Asn Arg Ile Phe Pro Leu Ser Glu Asp Tyr Ser Gly Ser
85     90     95
Gly Phe Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser Gly Phe
100    105    110
Leu Thr Glu Met Glu Gln Asp Tyr Gln Leu Val Asp Glu Ser Asp Ala
115    120    125
Phe His Asp Asn Leu Arg Ser Leu Asp Arg Asn Leu Pro Ser Asp Ser
130    135    140
Gln Asp Leu Gly Gln His Gly Leu Glu Glu Asp Phe Met Leu
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<210> 493

<211> 592

<212> PRT

<213> Homo sapiens

<400> 493

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Ala Ile Thr Gln Pro Met Val Val Val Ala Ile Val Gly Leu Tyr Arg

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- 440 -


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<210> 494
<211> 632
<212> PRT
<213> Homo sapiens
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Gln Thr Lys Lys Arg Met Ala Lys Pro Lys Asn Arg Ala Val Ala Gly
35     40     45
Thr Gly Ala Arg Ala Arg Ala Gly Leu Arg Ala Gly Phe Thr Ile Asp
50     55     60
Leu Gly Ser Gly Phe Ser Pro Pro Thr Pro Val Arg Ala Glu Ala Glu
65     70     75     80
Asp Arg Ala Gln Asp Glu Ala Ser Ala Leu Asp Thr Val Gly Ala Glu
85     90     95
Ala Val Ala Pro Ala Ala Ser Ser Ala Glu Ala Gln Ser Gly Ala Gly
100    105    110
Ser Gln Ala Gln Glu Ala Asp Gly Ala Gly Val Gly Pro Lys Ala Glu
115    120    125
Ser Val Val Gly Ala Ala Met Ala Ser Ala Ile Ala Pro Pro Pro Gly
130    135    140
Val Thr Glu Ala Leu Gly Ala Ala Glu Ala Pro Ala Met Ala Gly Ala
145    150    155    160
Pro Lys Val Ala Glu Ala Pro Arg Glu Ala Glu Thr Ser Arg Ala Ala
165    170    175
Val Pro Pro Gly Thr Val Val Pro Thr Glu Ala Ala Ala Pro Thr Glu
180    185    190
Val Thr Glu Gly Pro Gly Val Ala Ala Pro Thr Lys Val Ala Glu Ala
195    200    205
Pro Gly Val Ala Ser Pro Thr Glu Ala Ala Glu Ala Pro Val Pro Ala
210    215    220
Thr Pro Thr Gly Ala Ala Ala Pro Thr Gly Ala Ala Glu Ser Pro Gly
225    230    235    240
Thr Ser Gly Ser Pro Arg Thr Ala Val Val Pro Gly Thr Ser Ala Ala
245    250    255
Lys Lys Ala Thr Pro Gly Ala His Thr Gly Ala Ile Pro Lys Ala Thr
260    265    270
Ser Ala Thr Gly Ala Val Pro Lys Gly Gly Gly Lys Gly Val Thr Arg
275    280    285
Ser Arg Asn Gly Gly Lys Gly Lys Gly Lys Lys Ser Lys Val Glu Val
290    295    300
Asp Glu Leu Gly Met Gly Phe Arg Pro Gly Asp Gly Ala Ala Ala Ala
305    310    315    320
Ala Ala Ala Ser Ala Asn Gly Gly Gln Ala Phe Leu Ala Glu Val Pro
325    330    335
Asp Ser Glu Glu Gly Glu Ser Gly Trp Thr Asp Thr Glu Ser Asp Ser
340    345    350
Asp Ser Glu Pro Glu Thr Gln Arg Arg Gly Arg Gly Arg Pro Val
355    360    365
Ala Met Gln Lys Arg Pro Phe Pro Tyr Glu Ile Asp Glu Ile Leu Gly
370    375    380
Val Arg Asp Leu Arg Lys Val Leu Ala Leu Leu Gln Lys Ser Asp Asp
385    390    395    400
Pro Phe Ile Gln Gln Val Ala Leu Leu Thr Leu Ser Asn Asn Ala Asn
405    410    415
Tyr Ser Cys Asn Gln Glu Thr Ile Arg Lys Leu Gly Gly Leu Pro Ile
420    425    430
Ile Ala Asn Met Ile Asn Lys Thr Asp Pro His Ile Lys Glu Lys Ala
435    440    445
Leu Met Ala Met Asn Asn Leu Ser Glu Asn Tyr Glu Asn Gln Gly Arg
450    455    460
Leu Gln Val Tyr Met Asn Lys Val Met Asp Asp Ile Met Ala Ser Asn
465    470    475    480
Leu Asn Ser Ala Val Gln Val Val Gly Leu Lys Phe Leu Thr Asn Met
485    490    495
Thr Ile Thr Asn Asp Tyr Gln His Leu Leu Val Asn Ser Ile Ala Asn

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500
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 515 Gly Gly Lys Ile Lys Val Glu Ile
 Leu Lys Ile Leu Ser Asn Phe 520
 530 Ala Glu Asn Pro Asp Met Leu Lys Lys
 Leu Leu Ser Thr Gln Val 535
 545 Pro Ala Ser Phe Ser 540
 Tyr Val Glu Ser Glu Ile Leu Ile Asn Ala Leu Thr Leu Phe Glu Ile
 565 555 560
 Ile Tyr Asp Asn Leu Arg Ala Glu Val Phe Asn Tyr Arg Glu Phe Asn
 580 570 575
 Lys Gly Ser Leu Phe Tyr Leu Cys 585
 595 Thr Thr Ser Gly Val Cys Val Lys
 Lys Ile Arg Ala Leu Ala Asn His His Asp Leu Leu Val Lys Val Lys
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 Val Ile Lys Leu Val Asn Lys Phe 620
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<210> 495
 <211> 219
 <212> PRT
 <213> Homo sapiens
 <400> 495

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 Tyr Leu Leu Ile His Asn Asn Phe Gly Val Leu Phe His Asn Leu Pro
 35 40 45
 Ser Leu Thr Leu Gly Asn Val Phe Val Ile Val Gly Ser Ile Ile Met
 50 55 60
 Val Val Ala Phe Leu Gly Cys Met Gly Ser Ile Lys Glu Asn Lys Cys
 65 70 75 80
 Leu Leu Met Ser Phe Ile Leu Leu Leu Ile Ile Leu Leu Ala Glu
 85 90 95
 Val Thr Leu Ala Ile Leu Leu Phe Val Tyr Glu Gln Lys Leu Asn Glu
 100 105 110
 Tyr Val Ala Lys Gly Leu Thr Asp Ser Ile His Arg Tyr His Ser Asp
 115 120 125
 Asn Ser Thr Lys Ala Ala Trp Asp Ser Ile Gln Ser Phe Leu Gln Cys
 130 135 140
 Cys Gly Ile Asn Gly Thr Ser Asp Trp Thr Ser Gly Pro Pro Ala Ser
 145 150 155 160
 Cys Pro Ser Asp Arg Lys Val Glu Gly Cys Tyr Ala Lys Ala Arg Leu
 165 170 175
 Trp Phe His Ser Asn Phe Leu Tyr Ile Gly Ile Ile Thr Ile Cys Val
 180 185 190
 Cys Val Ile Glu Val Leu Gly Met Ser Phe Ala Leu Thr Leu Asn Cys
 195 200 205
 Gln Ile Asp Lys Thr Ser Gln Thr Ile Gly Leu
 210 215

<210> 496
 <211> 739
 <212> PRT
 <213> Homo sapiens
 <400> 496

Met Pro Gly Lys Met Val Val Ile Leu Gly Ala Ser Asn Ile Leu Trp
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 Ile Met Phe Ala Ala Ser Gln Ala Phe Lys Ile Glu Thr Thr Pro Glu
 20 25 30
 Ser Arg Tyr Leu Ala Gln Ile Gly Asp Ser Val Ser Leu Thr Cys Ser
 35 40 45
 Thr Thr Gly Cys Glu Ser Pro Phe Phe Ser Trp Arg Thr Gln Ile Asp
 50 55 60
 Ser Pro Leu Asn Gly Lys Val Thr Asn Glu Gly Thr Thr Ser Thr Leu
 65 70 75 80
 Thr Met Asn Pro Val Ser Phe Gly Asn Glu His Ser Tyr Leu Cys Thr
 85 90 95

Ala	Thr	Cys	Glu	Ser	Arg	Lys	Leu	Glu	Lys	Gly	Ile	Gln	Val	Glu	Ile
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Tyr	Ser	Phe	Pro	Lys	Asp	Pro	Glu	Ile	His	Leu	Ser	Gly	Pro	Leu	Glu
		115					120					125			
Ala	Gly	Lys	Pro	Ile	Thr	Val	Lys	Cys	Ser	Val	Ala	Asp	Val	Tyr	Pro
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Phe	Asp	Arg	Leu	Glu	Ile	Asp	Leu	Leu	Lys	Gly	Asp	His	Leu	Met	Lys
145					150					155					160
Ser	Gln	Glu	Phe	Leu	Glu	Asp	Ala	Asp	Arg	Lys	Ser	Leu	Glu	Thr	Lys
				165					170						175
Ser	Leu	Glu	Val	Thr	Phe	Thr	Pro	Val	Ile	Glu	Asp	Ile	Gly	Lys	Val
			180					185						190	
Leu	Val	Cys	Arg	Ala	Lys	Leu	His	Ile	Asp	Glu	Met	Asp	Ser	Val	Pro
		195					200					205			
Thr	Val	Arg	Gln	Ala	Val	Lys	Glu	Leu	Gln	Val	Tyr	Ile	Ser	Pro	Lys
		210				215						220			
Asn	Thr	Val	Ile	Ser	Val	Asn	Pro	Ser	Thr	Lys	Leu	Gln	Glu	Gly	Gly
225					230					235					240
Ser	Val	Thr	Met	Thr	Cys	Ser	Ser	Glu	Gly	Leu	Pro	Ala	Pro	Glu	Ile
				245					250						255
Phe	Trp	Ser	Lys	Lys	Leu	Asp	Asn	Gly	Asn	Leu	Gln	His	Leu	Ser	Gly
			260					265						270	
Asn	Ala	Thr	Leu	Thr	Leu	Ile	Ala	Met	Arg	Met	Glu	Asp	Ser	Gly	Ile
		275					280					285			
Tyr	Val	Cys	Glu	Gly	Val	Asn	Leu	Ile	Gly	Lys	Asn	Arg	Lys	Glu	Val
		290				295					300				
Glu	Leu	Ile	Val	Gln	Glu	Lys	Pro	Phe	Thr	Val	Glu	Ile	Ser	Pro	Gly
305					310					315					320
Pro	Arg	Ile	Ala	Ala	Gln	Ile	Gly	Asp	Ser	Val	Met	Leu	Thr	Cys	Ser
				325					330						335
Val	Met	Gly	Cys	Glu	Ser	Pro	Ser	Phe	Ser	Trp	Arg	Thr	Gln	Ile	Asp
			340					345						350	
Ser	Pro	Leu	Ser	Gly	Lys	Val	Arg	Ser	Glu	Gly	Thr	Asn	Ser	Thr	Leu
		355					360					365			
Thr	Leu	Ser	Pro	Val	Ser	Phe	Glu	Asn	Glu	His	Ser	Tyr	Leu	Cys	Thr
		370				375						380			
Val	Thr	Cys	Gly	His	Lys	Lys	Leu	Glu	Lys	Gly	Ile	Gln	Val	Glu	Leu
385					390					395					400
Tyr	Ser	Phe	Pro	Arg	Asp	Pro	Glu	Ile	Glu	Met	Ser	Gly	Gly	Leu	Val
				405					410						415
Asn	Gly	Ser	Ser	Val	Thr	Val	Ser	Cys	Lys	Val	Pro	Ser	Val	Tyr	Pro
			420					425					430		
Leu	Asp	Arg	Leu	Glu	Ile	Glu	Leu	Leu	Lys	Gly	Glu	Thr	Ile	Leu	Glu
		435					440					445			
Asn	Ile	Glu	Phe	Leu	Glu	Asp	Thr	Asp	Met	Lys	Ser	Leu	Glu	Asn	Lys
		450				455					460				
Ser	Leu	Glu	Met	Thr	Phe	Ile	Pro	Thr	Ile	Glu	Asp	Thr	Gly	Lys	Ala
465					470					475					480
Leu	Val	Cys	Gln	Ala	Lys	Leu	His	Ile	Asp	Asp	Met	Glu	Phe	Glu	Pro
				485					490						495
Lys	Gln	Arg	Gln	Ser	Thr	Gln	Thr	Leu	Tyr	Val	Asn	Val	Ala	Pro	Arg
			500					505					510		
Asp	Thr	Thr	Val	Leu	Val	Ser	Pro	Ser	Ser	Ile	Leu	Glu	Glu	Gly	Ser
		515					520					525			
Ser	Val	Asn	Met	Thr	Cys	Leu	Ser	Gln	Gly	Phe	Pro	Ala	Pro	Lys	Ile
		530				535					540				
Leu	Trp	Ser	Arg	Gln	Leu	Pro	Asn	Gly	Glu	Leu	Gln	Pro	Leu	Ser	Glu
545					550				555						560
Asn	Ala	Thr	Leu	Thr	Leu	Ile	Ser	Thr	Lys	Met	Glu	Asp	Ser	Gly	Val
				565					570						575
Tyr	Leu	Cys	Glu	Gly	Ile	Asn	Gln	Ala	Gly	Arg	Ser	Arg	Lys	Glu	Val
			580					585					590		
Glu	Leu	Ile	Ile	Gln	Val	Thr	Pro	Lys	Asp	Ile	Lys	Leu	Thr	Ala	Phe
		595					600					605			
Pro	Ser	Glu	Ser	Val	Lys	Glu	Gly	Asp	Thr	Val	Ile	Ile	Ser	Cys	Thr
		610				615					620				
Cys	Gly	Asn	Val	Pro	Glu	Thr	Trp	Ile	Ile	Leu	Lys	Lys	Lys	Ala	Glu
625					630					635					640
Thr	Gly	Asp	Thr	Val	Leu	Lys	Ser	Ile	Asp	Gly	Ala	Tyr	Thr	Ile	Arg

645 650 655
 Lys Ala Gln Leu Lys Asp Ala Gly Val Tyr Glu Cys Glu Ser Lys Asn
 660 665 670
 Lys Val Gly Ser Gln Leu Arg Ser Leu Thr Leu Asp Val Gln Gly Arg
 675 680 685
 Glu Asn Asn Lys Asp Tyr Phe Ser Pro Glu Leu Leu Val Leu Tyr Phe
 690 695 700
 Ala Ser Ser Leu Ile Ile Pro Ala Ile Gly Met Ile Ile Tyr Phe Ala
 705 710 715 720
 Arg Lys Ala Asn Met Lys Gly Ser Tyr Ser Leu Val Glu Ala Gln Lys
 725 730 735
 Ser Lys Val

<210> 497
 <211> 441
 <212> PRT
 <213> Homo sapiens
 <400> 497

Met Ala Glu Pro Arg Gln Glu Phe Glu Val Met Glu Asp His Ala Gly
 1 5 10 15
 Thr Tyr Gly Leu Gly Asp Arg Lys Asp Gln Gly Gly Tyr Thr Met His
 20 25 30
 Gln Asp Gln Glu Gly Asp Thr Asp Ala Gly Leu Lys Glu Ser Pro Leu
 35 40 45
 Gln Thr Pro Thr Glu Asp Gly Ser Glu Glu Pro Gly Ser Glu Thr Ser
 50 55 60
 Asp Ala Lys Ser Thr Pro Thr Ala Glu Asp Val Thr Ala Pro Leu Val
 65 70 75 80
 Asp Glu Gly Ala Pro Gly Lys Gln Ala Ala Glu Gln Pro His Thr Glu
 85 90 95
 Ile Pro Glu Gly Thr Thr Ala Glu Glu Ala Gly Ile Gly Asp Thr Pro
 100 105 110
 Ser Leu Glu Asp Glu Ala Ala Gly His Val Thr Gln Ala Arg Met Val
 115 120 125
 Ser Lys Ser Lys Asp Gly Thr Gly Ser Asp Asp Lys Lys Ala Lys Gly
 130 135 140
 Ala Asp Gly Lys Thr Lys Ile Ala Thr Pro Arg Gly Ala Ala Pro Pro
 145 150 155 160
 Gly Gln Lys Gly Gln Ala Asn Ala Thr Arg Ile Pro Ala Lys Thr Pro
 165 170 175
 Pro Ala Pro Lys Thr Pro Pro Ser Ser Gly Glu Pro Pro Lys Ser Gly
 180 185 190
 Asp Arg Ser Gly Tyr Ser Ser Pro Gly Ser Pro Gly Thr Pro Gly Ser
 195 200 205
 Arg Ser Arg Thr Pro Ser Leu Pro Thr Pro Pro Thr Arg Glu Pro Lys
 210 215 220
 Lys Val Ala Val Val Arg Thr Pro Pro Lys Ser Pro Ser Ser Ala Lys
 225 230 235 240
 Ser Arg Leu Gln Thr Ala Pro Val Pro Met Pro Asp Leu Lys Asn Val
 245 250 255
 Lys Ser Lys Ile Gly Ser Thr Glu Asn Leu Lys His Gln Pro Gly Gly
 260 265 270
 Gly Lys Val Gln Ile Ile Asn Lys Lys Leu Asp Leu Ser Asn Val Gln
 275 280 285
 Ser Lys Cys Gly Ser Lys Asp Asn Ile Lys His Val Pro Gly Gly Gly
 290 295 300
 Ser Val Gln Ile Val Tyr Lys Pro Val Asp Leu Ser Lys Val Thr Ser
 305 310 315 320
 Lys Cys Gly Ser Leu Gly Asn Ile His His Lys Pro Gly Gly Gly Gln
 325 330 335
 Val Glu Val Lys Ser Glu Lys Leu Asp Phe Lys Asp Arg Val Gln Ser
 340 345 350
 Lys Ile Gly Ser Leu Asp Asn Ile Thr His Val Pro Gly Gly Gly Asn
 355 360 365
 Lys Lys Ile Glu Thr His Lys Leu Thr Phe Arg Glu Asn Ala Lys Ala
 370 375 380
 Lys Thr Asp His Gly Ala Glu Ile Val Tyr Lys Ser Pro Val Val Ser
 385 390 395 400

Gly Asp Thr Ser Pro Arg His Leu Ser Asn Val Ser Ser Thr Gly Ser
 405 410 415
 Ile Asp Met Val Asp Ser Pro Gln Leu Ala Thr Leu Ala Asp Glu Val
 420 425 430
 Ser Ala Ser Leu Ala Lys Gln Gly Leu
 435 440

<210> 498
 <211> 476
 <212> PRT
 <213> Homo sapiens
 <400> 498

Met Met Thr Ala Lys Ala Val Asp Lys Ile Pro Val Thr Leu Ser Gly
 1 5 10 15
 Phe Val His Gln Leu Ser Asp Asn Ile Tyr Pro Val Glu Asp Leu Ala
 20 25 30
 Ala Thr Ser Val Thr Ile Phe Pro Asn Ala Glu Leu Gly Gly Pro Phe
 35 40 45
 Asp Gln Met Asn Gly Val Ala Gly Asp Gly Met Ile Asn Ile Asp Met
 50 55 60
 Thr Gly Glu Lys Arg Ser Leu Asp Leu Pro Tyr Pro Ser Ser Phe Ala
 65 70 75 80
 Pro Val Ser Ala Pro Arg Asn Gln Thr Phe Thr Tyr Met Gly Lys Phe
 85 90 95
 Ser Ile Asp Pro Gln Tyr Pro Gly Ala Ser Cys Tyr Pro Glu Gly Ile
 100 105 110
 Ile Asn Ile Val Ser Ala Gly Ile Leu Gln Gly Val Thr Ser Pro Ala
 115 120 125
 Ser Thr Thr Ala Ser Ser Ser Val Thr Ser Ala Ser Pro Asn Pro Leu
 130 135 140
 Ala Thr Gly Pro Leu Gly Val Cys Thr Met Ser Gln Thr Gln Pro Asp
 145 150 155 160
 Leu Asp His Leu Tyr Ser Pro Pro Pro Pro Pro Pro Tyr Ser Gly
 165 170 175
 Cys Ala Gly Asp Leu Tyr Gln Asp Pro Ser Ala Phe Leu Ser Ala Ala
 180 185 190
 Thr Thr Ser Thr Ser Ser Ser Leu Ala Tyr Pro Pro Pro Ser Tyr
 195 200 205
 Pro Ser Pro Lys Pro Ala Thr Asp Pro Gly Leu Phe Pro Met Ile Pro
 210 215 220
 Asp Tyr Pro Gly Phe Phe Pro Ser Gln Cys Gln Arg Asp Leu His Gly
 225 230 235 240
 Thr Ala Gly Pro Asp Arg Lys Pro Phe Pro Cys Pro Leu Asp Thr Leu
 245 250 255
 Arg Val Pro Pro Pro Leu Thr Pro Leu Ser Thr Ile Arg Asn Phe Thr
 260 265 270
 Leu Gly Gly Pro Ser Ala Gly Val Thr Gly Pro Gly Ala Ser Gly Gly
 275 280 285
 Ser Glu Gly Pro Arg Leu Pro Gly Ser Ser Ser Ala Ala Ala Ala Ala
 290 295 300
 Ala Ala Ala Ala Ala Tyr Asn Pro His His Leu Pro Leu Arg Pro Ile
 305 310 315 320
 Leu Arg Pro Arg Lys Tyr Pro Asn Arg Pro Ser Lys Thr Pro Val His
 325 330 335
 Glu Arg Pro Tyr Pro Cys Pro Ala Glu Gly Cys Asp Arg Arg Phe Ser
 340 345 350
 Arg Ser Asp Glu Leu Thr Arg His Ile Arg Ile His Thr Gly His Lys
 355 360 365
 Pro Phe Gln Cys Arg Ile Cys Met Arg Asn Phe Ser Arg Ser Asp His
 370 375 380
 Leu Thr Thr His Ile Arg Thr His Thr Gly Glu Lys Pro Phe Ala Cys
 385 390 395 400
 Asp Tyr Cys Gly Arg Lys Phe Ala Arg Ser Asp Glu Arg Lys Arg His
 405 410 415
 Thr Lys Ile His Leu Arg Gln Lys Glu Arg Lys Ser Ser Ala Pro Ser
 420 425 430
 Ala Ser Val Pro Ala Pro Ser Thr Ala Ser Cys Ser Gly Gly Val Gln
 435 440 445
 Pro Gly Gly Thr Leu Cys Ser Ser Asn Ser Ser Ser Leu Gly Gly Gly

450
 Pro Leu Ala Pro Cys Ser Ser Arg Thr Arg Thr Pro
 465 470 475

<210> 499
 <211> 406
 <212> PRT
 <213> Homo sapiens
 <400> 499

Met Ser Gly Cys Pro Phe Leu Gly Asn Asn Phe Gly Tyr Thr Phe Lys
 1 5 10 15
 Lys Leu Pro Val Glu Gly Ser Glu Glu Asp Lys Ser Gln Thr Gly Val
 20 25 30
 Asn Arg Ala Ser Lys Gly Gly Leu Ile Tyr Gly Asn Tyr Leu His Leu
 35 40 45
 Glu Lys Val Leu Asn Ala Gln Glu Leu Gln Ser Glu Thr Lys Gly Asn
 50 55 60
 Lys Ile His Asp Glu His Leu Phe Ile Ile Thr His Gln Ala Tyr Glu
 65 70 75 80
 Leu Trp Phe Lys Gln Ile Leu Trp Glu Leu Asp Ser Val Arg Glu Ile
 85 90 95
 Phe Gln Asn Gly His Val Arg Asp Glu Arg Asn Met Leu Lys Val Val
 100 105 110
 Ser Arg Met His Arg Val Ser Val Ile Leu Lys Leu Leu Val Gln Gln
 115 120 125
 Phe Ser Ile Leu Glu Thr Met Thr Ala Leu Asp Phe Asn Asp Phe Arg
 130 135 140
 Glu Tyr Leu Ser Pro Ala Ser Gly Phe Gln Ser Leu Gln Phe Arg Leu
 145 150 155 160
 Leu Glu Asn Lys Ile Gly Val Leu Gln Asn Met Arg Val Pro Tyr Asn
 165 170 175
 Arg Arg His Tyr Arg Asp Asn Phe Lys Gly Glu Glu Asn Glu Leu Leu
 180 185 190
 Leu Lys Ser Glu Gln Glu Lys Thr Leu Leu Glu Leu Val Glu Ala Trp
 195 200 205
 Leu Glu Arg Thr Pro Gly Leu Glu Pro His Gly Phe Asn Phe Trp Gly
 210 215 220
 Lys Leu Glu Lys Asn Ile Thr Arg Gly Leu Glu Glu Glu Phe Ile Arg
 225 230 235 240
 Ile Gln Ala Lys Glu Ser Glu Glu Lys Glu Glu Gln Val Ala Glu
 245 250 255
 Phe Gln Lys Gln Lys Glu Val Leu Leu Ser Leu Phe Asp Glu Lys Arg
 260 265 270
 His Glu His Leu Leu Ser Lys Gly Glu Arg Arg Leu Ser Tyr Arg Ala
 275 280 285
 Leu Gln Gly Ala Leu Met Ile Tyr Phe Tyr Arg Glu Glu Pro Arg Phe
 290 295 300
 Gln Val Pro Phe Gln Leu Leu Thr Ser Leu Met Asp Ile Asp Ser Leu
 305 310 315 320
 Met Thr Lys Trp Arg Tyr Asn His Val Cys Met Val His Arg Met Leu
 325 330 335
 Gly Ser Lys Ala Gly Thr Gly Gly Ser Ser Gly Tyr His Tyr Leu Arg
 340 345 350
 Ser Thr Val Ser Asp Arg Tyr Lys Val Phe Val Asp Leu Phe Asn Leu
 355 360 365
 Ser Thr Tyr Leu Ile Pro Arg His Trp Ile Pro Lys Met Asn Pro Thr
 370 375 380
 Ile His Lys Phe Leu Tyr Thr Ala Glu Tyr Cys Asp Ser Ser Tyr Phe
 385 390 395 400
 Ser Ser Asp Glu Ser Asp

<210> 500
 <211> 470
 <212> PRT
 <213> Homo sapiens
 <400> 500

Met Leu Arg Gly Ile Ser Gln Leu Pro Ala Val Ala Thr Met Ser Trp
 1 5 10 15

Val Leu Leu Pro Val Leu Trp Leu Ile Val Gln Thr Gln Ala Ile Ala
 20 25 30
 Ile Lys Gln Thr Pro Glu Leu Thr Leu His Glu Ile Val Cys Pro Lys
 35 40 45
 Lys Leu His Ile Leu His Lys Arg Glu Ile Lys Asn Asn Gln Thr Glu
 50 55 60
 Lys His Gly Lys Glu Glu Arg Tyr Glu Pro Glu Val Gln Tyr Gln Met
 65 70 75 80
 Ile Leu Asn Gly Glu Glu Ile Ile Leu Ser Leu Gln Lys Thr Lys His
 85 90 95
 Leu Leu Gly Pro Asp Tyr Thr Glu Thr Leu Tyr Ser Pro Arg Gly Glu
 100 105 110
 Glu Ile Thr Thr Lys Pro Glu Asn Met Glu His Cys Tyr Tyr Lys Gly
 115 120 125
 Asn Ile Leu Asn Glu Lys Asn Ser Val Ala Ser Ile Ser Thr Cys Asp
 130 135 140
 Gly Leu Arg Gly Tyr Phe Thr His His His Gln Arg Tyr Gln Ile Lys
 145 150 155 160
 Pro Leu Lys Ser Thr Asp Glu Lys Glu His Ala Val Phe Thr Ser Asn
 165 170 175
 Gln Glu Glu Gln Asp Pro Ala Asn His Thr Cys Gly Val Lys Ser Thr
 180 185 190
 Asp Gly Lys Gln Gly Pro Ile Arg Ile Ser Arg Ser Leu Lys Ser Pro
 195 200 205
 Glu Lys Glu Asp Phe Leu Arg Ala Gln Lys Tyr Ile Asp Leu Tyr Leu
 210 215 220
 Val Leu Asp Asn Ala Phe Tyr Lys Asn Tyr Asn Glu Asn Leu Thr Leu
 225 230 235 240
 Ile Arg Ser Phe Val Phe Asp Val Met Asn Leu Leu Asn Val Ile Tyr
 245 250 255
 Asn Thr Ile Asp Val Gln Val Ala Leu Val Gly Met Glu Ile Trp Ser
 260 265 270
 Asp Gly Asp Lys Ile Lys Val Val Pro Ser Ala Ser Thr Thr Phe Asp
 275 280 285
 Asn Phe Leu Arg Trp His Ser Ser Asn Leu Gly Lys Lys Ile His Asp
 290 295 300
 His Ala Gln Leu Leu Ser Gly Ile Ser Phe Asn Asn Arg Arg Val Gly
 305 310 315 320
 Leu Ala Ala Ser Asn Ser Leu Cys Ser Pro Ser Ser Val Ala Val Ile
 325 330 335
 Glu Ala Lys Lys Lys Asn Asn Val Ala Leu Val Gly Val Met Ser His
 340 345 350
 Glu Leu Gly His Val Leu Gly Met Pro Asp Val Pro Phe Asn Thr Lys
 355 360 365
 Cys Pro Ser Gly Ser Cys Val Met Asn Gln Tyr Leu Ser Ser Lys Phe
 370 375 380
 Pro Lys Asp Phe Ser Thr Ser Cys Arg Ala His Phe Glu Arg Tyr Leu
 385 390 395 400
 Leu Ser Gln Lys Pro Lys Cys Leu Leu Gln Ala Pro Ile Pro Thr Asn
 405 410 415
 Ile Met Thr Thr Pro Val Cys Gly Asn His Leu Leu Glu Val Gly Glu
 420 425 430
 Asp Cys Asp Cys Gly Ser Pro Lys Glu Cys Thr Asn Leu Cys Cys Glu
 435 440 445
 Ala Leu Thr Cys Lys Leu Lys Pro Gly Thr Asp Cys Gly Gly Asp Ala
 450 455 460
 Pro Asn His Thr Thr Glu
 465 470

<210> 501
 <211> 347
 <212> PRT
 <213> Homo sapiens
 <400> 501

Met Thr Leu Asp His Gln Ile Ile Asn Pro Thr Leu Lys Trp Ser Gln
 1 5 10 15
 Pro Ala Val Pro Ser Gly Gly Pro Leu Val Gln His Ala His Thr Thr
 20 25 30
 Leu Asp Ser Asp Ala Gly Leu Thr Glu Asn Pro Leu Thr Lys Leu Leu

35 40 45
 Ala Ile Gly Lys Glu Asp Asp Asn Ala Gln Trp His Met Glu Asp Val
 50 55 60
 Ile Glu Asp Ile Ile Gly Met Glu Ser Ser Phe Lys Glu Glu Gly Ala
 65 70 75 80
 Asp Ser Pro Leu Leu Met Gln Arg Thr Leu Ser Gly Ser Ile Leu Asp
 85 90 95
 Val Tyr Ser Gly Glu Gln Gly Ile Ser Pro Ile Asn Met Gly Leu Thr
 100 105 110
 Ser Ala Ser Cys Pro Ser Ser Leu Pro Met Lys Arg Glu Ile Thr Glu
 115 120 125
 Thr Asp Thr Arg Ala Leu Ala Lys Glu Arg Gln Lys Lys Asp Asn His
 130 135 140
 Asn Leu Ile Glu Arg Arg Arg Arg Tyr Asn Ile Asn Tyr Arg Ile Lys
 145 150 155 160
 Glu Leu Gly Thr Leu Ile Pro Lys Ser Asn Asp Pro Asp Met Arg Trp
 165 170 175
 Asn Lys Gly Thr Ile Leu Lys Ala Ser Val Glu Tyr Ile Lys Trp Leu
 180 185 190
 Gln Lys Glu Gln Gln Arg Ala Arg Glu Leu Glu His Arg Gln Lys Lys
 195 200 205
 Leu Glu Gln Ala Asn Arg Arg Leu Leu Leu Arg Ile Gln Glu Leu Glu
 210 215 220
 Ile Gln Ala Arg Thr His Gly Leu Pro Thr Leu Ala Ser Leu Gly Thr
 225 230 235 240
 Val Asp Leu Gly Ala His Val Thr Lys Gln Ser His Pro Glu Gln
 245 250 255
 Asn Ser Val Asp Tyr Cys Gln Gln Leu Thr Val Ser Gln Gly Pro Ser
 260 265 270
 Pro Glu Leu Cys Asp Gln Ala Ile Ala Phe Ser Asp Pro Leu Ser Tyr
 275 280 285
 Phe Thr Asp Leu Ser Phe Ser Ala Ala Leu Lys Glu Glu Gln Arg Leu
 290 295 300
 Asp Gly Met Leu Leu Asp Asp Thr Ile Ser Pro Phe Gly Thr Asp Pro
 305 310 315 320
 Leu Leu Ser Ala Thr Ser Pro Ala Val Ser Lys Glu Ser Ser Arg Arg
 325 330 335
 Ser Ser Phe Ser Ser Asp Asp Gly Asp Glu Leu
 340 345

<210> 502
 <211> 162
 <212> PRT
 <213> Homo sapiens
 <400> 502

Met Lys Glu Thr Ile Met Asn Gln Glu Lys Leu Ala Lys Leu Gln Ala
 1 5 10 15
 Gln Val Arg Ile Gly Gly Lys Gly Thr Ala Arg Arg Lys Lys Lys Val
 20 25 30
 Val His Arg Thr Ala Thr Ala Asp Lys Lys Leu Gln Phe Ser Leu
 35 40 45
 Lys Lys Leu Gly Val Asn Asn Ile Ser Gly Ile Glu Glu Val Asn Met
 50 55 60
 Phe Thr Asn Gln Gly Thr Val Ile His Phe Asn Asn Pro Lys Val Gln
 65 70 75 80
 Ala Ser Leu Ala Ala Asn Thr Phe Thr Ile Thr Gly His Ala Glu Thr
 85 90 95
 Lys Gln Leu Thr Glu Met Leu Pro Ser Ile Leu Asn Gln Leu Gly Ala
 100 105 110
 Asp Ser Leu Thr Ser Leu Arg Arg Leu Ala Glu Ala Leu Pro Lys Gln
 115 120 125
 Ser Val Asp Gly Lys Ala Pro Leu Ala Thr Gly Glu Asp Asp Asp
 130 135 140
 Glu Val Pro Asp Leu Val Glu Asn Phe Asp Glu Ala Ser Lys Asn Glu
 145 150 155 160
 Ala Asn

<210> 503

<211> 2602
 <212> PRT
 <213> Homo sapiens
 <400> 503
 Met Pro Val Thr Glu Lys Asp Leu Ala Glu Asp Ala Pro Trp Lys Lys
 1 5 10 15
 Ile Gln Gln Asn Thr Phe Thr Arg Trp Cys Asn Glu His Leu Lys Cys
 20 25 30
 Val Asn Lys Arg Ile Gly Asn Leu Gln Thr Asp Leu Ser Asp Gly Leu
 35 40 45
 Arg Leu Ile Ala Leu Leu Glu Val Leu Ser Gln Lys Arg Met Tyr Arg
 50 55 60
 Lys Tyr His Gln Arg Pro Thr Phe Arg Gln Met Gln Leu Glu Asn Val
 65 70 75 80
 Ser Val Ala Leu Glu Phe Leu Asp Arg Glu Ser Ile Lys Leu Val Ser
 85 90 95
 Ile Asp Ser Lys Ala Ile Val Asp Gly Asn Leu Lys Leu Ile Leu Gly
 100 105 110
 Leu Val Trp Thr Leu Ile Leu His Tyr Ser Ile Ser Met Pro Val Trp
 115 120 125
 Glu Asp Glu Gly Asp Asp Asp Ala Lys Lys Gln Thr Pro Lys Gln Arg
 130 135 140
 Leu Leu Gly Trp Ile Gln Asn Lys Ile Pro Tyr Leu Pro Ile Thr Asn
 145 150 155 160
 Phe Asn Gln Asn Trp Gln Asp Gly Lys Ala Leu Gly Ala Leu Val Asp
 165 170 175
 Ser Cys Ala Pro Gly Leu Cys Pro Asp Trp Glu Ser Trp Asp Pro Gln
 180 185 190
 Lys Pro Val Asp Asn Ala Arg Glu Ala Met Gln Gln Ala Asp Asp Trp
 195 200 205
 Leu Gly Val Pro Gln Val Ile Thr Pro Glu Glu Ile Ile His Pro Asp
 210 215 220
 Val Asp Glu His Ser Val Met Thr Tyr Leu Ser Gln Phe Pro Lys Ala
 225 230 235 240
 Lys Leu Lys Pro Gly Ala Pro Leu Lys Pro Lys Leu Asn Pro Lys Lys
 245 250 255
 Ala Arg Ala Tyr Gly Arg Gly Ile Glu Pro Thr Gly Asn Met Val Lys
 260 265 270
 Gln Pro Ala Lys Phe Thr Val Asp Thr Ile Ser Ala Gly Gln Gly Asp
 275 280 285
 Val Met Val Phe Val Glu Asp Pro Glu Gly Asn Lys Glu Glu Ala Gln
 290 295 300
 Val Thr Pro Asp Ser Asp Lys Asn Lys Thr Tyr Ser Val Glu Tyr Leu
 305 310 315 320
 Pro Lys Val Thr Gly Leu His Lys Val Thr Val Leu Phe Ala Gly Gln
 325 330 335
 His Ile Ser Lys Ser Pro Phe Glu Val Ser Val Asp Lys Ala Gln Gly
 340 345 350
 Asp Ala Ser Lys Val Thr Ala Lys Gly Pro Gly Leu Glu Ala Val Gly
 355 360 365
 Asn Ile Ala Asn Lys Pro Thr Tyr Phe Asp Ile Tyr Thr Ala Gly Ala
 370 375 380
 Gly Val Gly Asp Ile Gly Val Glu Val Glu Asp Pro Gln Gly Lys Asn
 385 390 395 400
 Thr Val Glu Leu Leu Val Glu Asp Lys Gly Asn Gln Val Tyr Arg Cys
 405 410 415
 Val Tyr Lys Pro Met Gln Pro Gly Pro His Val Val Lys Ile Phe Phe
 420 425 430
 Ala Gly Asp Thr Ile Pro Lys Ser Pro Phe Val Val Gln Val Gly Glu
 435 440 445
 Ala Cys Asn Pro Asn Ala Cys Arg Ala Ser Gly Arg Gly Leu Gln Pro
 450 455 460
 Lys Gly Val Arg Ile Arg Glu Thr Thr Asp Phe Lys Val Asp Thr Lys
 465 470 475 480
 Ala Ala Gly Ser Gly Glu Leu Gly Val Thr Met Lys Gly Pro Lys Gly
 485 490 495
 Leu Glu Glu Leu Val Lys Gln Lys Asp Phe Leu Asp Gly Val Tyr Ala
 500 505 510
 Phe Glu Tyr Tyr Pro Ser Thr Pro Gly Arg Tyr Ser Ile Ala Ile Thr

- 450 -

Gly Thr	Gly Gly Leu Gly Leu	Thr Val Glu Gly Pro	Cys Glu Ala
1070	1075	1080	
Lys Ile	Glu Cys Ser Asp Asn	Gly Asp Gly Thr Cys	Ser Val Ser
1085	1090	1095	
Tyr Leu	Pro Thr Lys Pro Gly	Glu Tyr Phe Val Asn	Ile Leu Phe
1100	1105	1110	
Glu Glu	Val His Ile Pro Gly	Ser Pro Phe Lys Ala	Asp Ile Glu
1115	1120	1125	
Met Pro	Phe Asp Pro Ser Lys	Val Val Ala Ser Gly	Pro Gly Leu
1130	1135	1140	
Glu His	Gly Lys Val Gly Glu	Ala Gly Leu Leu Ser	Val Asn Cys
1145	1150	1155	
Ser Glu	Ala Gly Pro Gly Ala	Leu Gly Leu Glu Ala	Val Ser Asp
1160	1165	1170	
Ser Gly	Thr Lys Ala Glu Val	Ser Ile Gln Asn Asn	Lys Asp Gly
1175	1180	1185	
Thr Tyr	Ala Val Thr Tyr Val	Pro Leu Thr Ala Gly	Met Tyr Thr
1190	1195	1200	
Leu Thr	Met Lys Tyr Gly Gly	Glu Leu Val Pro His	Phe Pro Ala
1205	1210	1215	
Arg Val	Lys Val Glu Pro Ala	Val Asp Thr Ser Arg	Ile Lys Val
1220	1225	1230	
Phe Gly	Pro Gly Ile Glu Gly	Lys Asp Val Phe Arg	Glu Ala Thr
1235	1240	1245	
Thr Asp	Phe Thr Val Asp Ser	Arg Pro Leu Thr Gln	Val Gly Gly
1250	1255	1260	
Asp His	Ile Lys Ala His Ile	Ala Asn Pro Ser Gly	Ala Ser Thr
1265	1270	1275	
Glu Cys	Phe Val Thr Asp Asn	Ala Asp Gly Thr Tyr	Gln Val Glu
1280	1285	1290	
Tyr Thr	Pro Phe Glu Lys Gly	Leu His Val Val Glu	Val Thr Tyr
1295	1300	1305	
Asp Asp	Val Pro Ile Pro Asn	Ser Pro Phe Lys Val	Ala Val Thr
1310	1315	1320	
Glu Gly	Cys Gln Pro Ser Arg	Val Gln Ala Gln Gly	Pro Gly Leu
1325	1330	1335	
Lys Glu	Ala Phe Thr Asn Lys	Pro Asn Val Phe Thr	Val Val Thr
1340	1345	1350	
Arg Gly	Ala Gly Ile Gly Gly	Leu Gly Ile Thr Val	Glu Gly Pro
1355	1360	1365	
Ser Glu	Ser Lys Ile Asn Cys	Arg Asp Asn Lys Asp	Gly Ser Cys
1370	1375	1380	
Ser Ala	Glu Tyr Ile Pro Phe	Ala Pro Gly Asp Tyr	Asp Val Asn
1385	1390	1395	
Ile Thr	Tyr Gly Gly Ala His	Ile Pro Gly Ser Pro	Phe Arg Val
1400	1405	1410	
Pro Val	Lys Asp Val Val Asp	Pro Ser Lys Val Lys	Ile Ala Gly
1415	1420	1425	
Pro Gly	Leu Gly Ser Gly Val	Arg Ala Arg Val Leu	Gln Ser Phe
1430	1435	1440	
Thr Val	Asp Ser Ser Lys Ala	Gly Leu Ala Pro Leu	Glu Val Arg
1445	1450	1455	
Val Leu	Gly Pro Arg Gly Leu	Val Glu Pro Val Asn	Met Val Asp
1460	1465	1470	
Asn Gly	Asp Gly Thr His Thr	Val Thr Tyr Thr Pro	Ser Gln Glu
1475	1480	1485	
Gly Pro	Tyr Met Val Ser Val	Lys Tyr Ala Asp Glu	Glu Ile Pro
1490	1495	1500	
Arg Ser	Pro Phe Lys Val Lys	Val Leu Pro Thr Tyr	Asp Ala Ser
1505	1510	1515	
Lys Val	Thr Ala Ser Gly Pro	Gly Leu Ser Ser Tyr	Gly Val Pro
1520	1525	1530	
Ala Ser	Leu Pro Val Asp Phe	Ala Ile Asp Ala Arg	Asp Ala Gly
1535	1540	1545	
Glu Gly	Leu Leu Ala Val Gln	Ile Thr Asp Gln Glu	Gly Lys Pro
1550	1555	1560	
Lys Arg	Ala Ile Val His Asp	Asn Lys Asp Gly Thr	Tyr Ala Val
1565	1570	1575	
Thr Tyr	Ile Pro Asp Lys Thr	Gly Arg Tyr Met Ile	Gly Val Thr

1580	Tyr Gly Gly Asp Asp Ile	1585	Pro Leu Ser Pro Tyr	1590	Arg Ile Arg Ala
1595	Thr Gln Thr Gly Asp Ala	1600	Ser Lys Cys Leu Ala	1605	Thr Gly Pro Gly
1610	Ile Ala Ser Thr Val Lys	1615	Thr Gly Glu Glu Val	1620	Gly Phe Val Val
1625	Asp Ala Lys Thr Ala Gly	1630	Lys Gly Lys Val Thr	1635	Cys Thr Val Leu
1640	Thr Pro Asp Gly Thr Glu	1645	Ala Glu Ala Asp Val	1650	Ile Glu Asn Glu
1655	Asp Gly Thr Tyr Asp Ile	1660	Phe Tyr Thr Ala Ala	1665	Lys Pro Gly Thr
1670	Tyr Val Ile Tyr Val Arg	1675	Phe Gly Gly Val Asp	1680	Ile Pro Asn Ser
1685	Pro Phe Thr Val Met Ala	1690	Thr Asp Gly Glu Val	1695	Thr Ala Val Glu
1700	Glu Ala Pro Val Asn Ala	1705	Cys Pro Pro Gly Phe	1710	Arg Pro Trp Val
1715	Thr Glu Glu Ala Tyr Val	1720	Pro Val Ser Asp Met	1725	Asn Gly Leu Gly
1730	Phe Lys Pro Phe Asp Leu	1735	Val Ile Pro Phe Ala	1740	Val Arg Lys Gly
1745	Glu Ile Thr Gly Glu Val	1750	His Met Pro Ser Gly	1755	Lys Thr Ala Thr
1760	Pro Glu Ile Val Asp Asn	1765	Lys Asp Gly Thr Val	1770	Thr Val Arg Tyr
1775	Ala Pro Thr Glu Val Gly	1780	Leu His Glu Met His	1785	Ile Lys Tyr Met
1790	Gly Ser His Ile Pro Glu	1795	Ser Pro Leu Gln Phe	1800	Tyr Val Asn Tyr
1805	Pro Asn Ser Gly Ser Val	1810	Ser Ala Tyr Gly Pro	1815	Gly Leu Val Tyr
1820	Gly Val Ala Asn Lys Thr	1825	Ala Thr Phe Thr Ile	1830	Val Thr Glu Asp
1835	Ala Gly Glu Gly Gly Leu	1840	Asp Leu Ala Ile Glu	1845	Gly Pro Ser Lys
1850	Ala Glu Ile Ser Cys Ile	1855	Asp Asn Lys Asp Gly	1860	Thr Cys Thr Val
1865	Thr Tyr Leu Pro Thr Leu	1870	Pro Gly Asp Tyr Ser	1875	Ile Leu Val Lys
1880	Tyr Asn Asp Lys His Ile	1885	Pro Gly Ser Pro Phe	1890	Thr Ala Lys Ile
1895	Thr Asp Asp Ser Arg Arg	1900	Cys Ser Gln Val Lys	1905	Leu Gly Ser Ala
1910	Ala Asp Phe Leu Leu Asp	1915	Ile Ser Glu Thr Asp	1920	Leu Ser Ser Leu
1925	Thr Ala Ser Ile Lys Ala	1930	Pro Ser Gly Arg Asp	1935	Glu Pro Cys Leu
1940	Leu Lys Arg Leu Pro Asn	1945	Asn His Ile Gly Ile	1950	Ser Phe Ile Pro
1955	Arg Glu Val Gly Glu His	1960	Leu Val Ser Ile Lys	1965	Lys Asn Gly Asn
1970	His Val Ala Asn Ser Pro	1975	Val Ser Ile Met Val	1980	Val Gln Ser Glu
1985	Ile Gly Asp Ala Arg Arg	1990	Ala Lys Val Tyr Gly	1995	Arg Gly Leu Ser
2000	Glu Gly Arg Thr Phe Glu	2005	Met Ser Asp Phe Ile	2010	Val Asp Thr Arg
2015	Asp Ala Gly Tyr Gly Gly	2020	Ile Ser Leu Ala Val	2025	Glu Gly Pro Ser
2030	Lys Val Asp Ile Gln Thr	2035	Glu Asp Leu Glu Asp	2040	Gly Thr Cys Lys
2045	Val Ser Tyr Phe Pro Thr	2050	Val Pro Gly Val Tyr	2055	Ile Val Ser Thr
2060	Lys Phe Ala Asp Glu His	2065	Val Pro Gly Ser Pro	2070	Phe Thr Val Lys
2075	Ile Ser Gly Glu Gly Arg	2080	Val Lys Glu Ser Ile	2085	Thr Arg Thr Ser
2090		2095		2100	

Arg Ala	Pro Ser Val Ala Thr	Val Gly Ser Ile Cys	Asp Leu Asn
2105	2110	2115	
Leu Lys	Ile Pro Glu Ile Asn	Ser Ser Asp Met Ser	Ala His Val
2120	2125	2130	
Thr Ser	Pro Ser Gly Arg Val	Thr Glu Ala Glu Ile	Val Pro Met
2135	2140	2145	
Gly Lys	Asn Ser His Cys Val	Arg Phe Val Pro Gln	Glu Met Gly
2150	2155	2160	
Val His	Thr Val Ser Val Lys	Tyr Arg Gly Gln His	Val Thr Gly
2165	2170	2175	
Ser Pro	Phe Gln Phe Thr Val	Gly Pro Leu Gly Glu	Gly Gly Ala
2180	2185	2190	
His Lys	Val Arg Ala Gly Gly	Pro Gly Leu Glu Arg	Gly Glu Ala
2195	2200	2205	
Gly Val	Pro Ala Glu Phe Ser	Ile Trp Thr Arg Glu	Ala Gly Ala
2210	2215	2220	
Gly Gly	Leu Ser Ile Ala Val	Glu Gly Pro Ser Lys	Ala Glu Ile
2225	2230	2235	
Thr Phe	Asp Asp His Lys Asn	Gly Ser Cys Gly Val	Ser Tyr Ile
2240	2245	2250	
Ala Gln	Glu Pro Gly Asn Tyr	Glu Val Ser Ile Lys	Phe Asn Asp
2255	2260	2265	
Glu His	Ile Pro Glu Ser Pro	Tyr Leu Val Pro Val	Ile Ala Pro
2270	2275	2280	
Ser Asp	Asp Ala Arg Arg Leu	Thr Val Met Ser Leu	Gln Glu Ser
2285	2290	2295	
Gly Leu	Lys Val Asn Gln Pro	Ala Ser Phe Ala Ile	Arg Leu Asn
2300	2305	2310	
Gly Ala	Lys Gly Lys Ile Asp	Ala Lys Val His Ser	Pro Ser Gly
2315	2320	2325	
Ala Val	Glu Glu Cys His Val	Ser Glu Leu Glu Pro	Asp Lys Tyr
2330	2335	2340	
Ala Val	Arg Phe Ile Pro His	Glu Asn Gly Val His	Thr Ile Asp
2345	2350	2355	
Val Lys	Phe Asn Gly Ser His	Val Val Gly Ser Pro	Phe Lys Val
2360	2365	2370	
Arg Val	Gly Glu Pro Gly Gln	Ala Gly Asn Pro Ala	Leu Val Ser
2375	2380	2385	
Ala Tyr	Gly Thr Gly Leu Glu	Gly Gly Thr Thr Gly	Ile Gln Ser
2390	2395	2400	
Glu Phe	Phe Ile Asn Thr Thr	Arg Ala Gly Pro Gly	Thr Leu Ser
2405	2410	2415	
Val Thr	Ile Glu Gly Pro Ser	Lys Val Lys Met Asp	Cys Gln Glu
2420	2425	2430	
Thr Pro	Glu Gly Tyr Lys Val	Met Tyr Thr Pro Met	Ala Pro Gly
2435	2440	2445	
Asn Tyr	Leu Ile Ser Val Lys	Tyr Gly Gly Pro Asn	His Ile Val
2450	2455	2460	
Gly Ser	Pro Phe Lys Ala Lys	Val Thr Gly Gln Arg	Leu Val Ser
2465	2470	2475	
Pro Gly	Ser Ala Asn Glu Thr	Ser Ser Ile Leu Val	Glu Ser Val
2480	2485	2490	
Thr Arg	Ser Ser Thr Glu Thr	Cys Tyr Ser Ala Ile	Pro Lys Ala
2495	2500	2505	
Ser Ser	Asp Ala Ser Lys Val	Thr Ser Lys Gly Ala	Gly Leu Ser
2510	2515	2520	
Lys Ala	Phe Val Gly Gln Lys	Ser Ser Phe Leu Val	Asp Cys Ser
2525	2530	2535	
Lys Ala	Gly Ser Asn Met Leu	Leu Ile Gly Val His	Gly Pro Thr
2540	2545	2550	
Thr Pro	Cys Glu Glu Val Ser	Met Lys His Val Gly	Asn Gln Gln
2555	2560	2565	
Tyr Asn	Val Thr Tyr Val Val	Lys Glu Arg Gly Asp	Tyr Val Leu
2570	2575	2580	
Ala Val	Lys Trp Gly Glu Glu	His Ile Pro Gly Ser	Pro Phe His
2585	2590	2595	
Val Thr	Val Pro		
2600			

<210> 504
 <211> 760
 <212> PRT
 <213> Homo sapiens
 <400> 504
 Met Met Asp Gln Ala Arg Ser Ala Phe Ser Asn Leu Phe Gly Gly Glu
 1 5 10 15
 Pro Leu Ser Tyr Thr Arg Phe Ser Leu Ala Arg Gln Val Asp Gly Asp
 20 25 30
 Asn Ser His Val Glu Met Lys Leu Ala Val Asp Glu Glu Glu Asn Ala
 35 40 45
 Asp Asn Asn Thr Lys Ala Asn Val Thr Lys Pro Lys Arg Cys Ser Gly
 50 55 60
 Ser Ile Cys Tyr Gly Thr Ile Ala Val Ile Val Phe Phe Leu Ile Gly
 65 70 75 80
 Phe Met Ile Gly Tyr Leu Gly Tyr Cys Lys Gly Val Glu Pro Lys Thr
 85 90 95
 Glu Cys Glu Arg Leu Ala Gly Thr Glu Ser Pro Val Arg Glu Glu Pro
 100 105 110
 Gly Glu Asp Phe Pro Ala Ala Arg Leu Tyr Trp Asp Asp Leu Lys
 115 120 125
 Arg Lys Leu Ser Glu Lys Leu Asp Ser Thr Asp Phe Thr Ser Thr Ile
 130 135 140
 Lys Leu Leu Asn Glu Asn Ser Tyr Val Pro Arg Glu Ala Gly Ser Gln
 145 150 155 160
 Lys Asp Glu Asn Leu Ala Leu Tyr Val Glu Asn Gln Phe Arg Glu Phe
 165 170 175
 Lys Leu Ser Lys Val Trp Arg Asp Gln His Phe Val Lys Ile Gln Val
 180 185 190
 Lys Asp Ser Ala Gln Asn Ser Val Ile Ile Val Asp Lys Asn Gly Arg
 195 200 205
 Leu Val Tyr Leu Val Glu Asn Pro Gly Gly Tyr Val Ala Tyr Ser Lys
 210 215 220
 Ala Ala Thr Val Thr Gly Lys Leu Val His Ala Asn Phe Gly Thr Lys
 225 230 235 240
 Lys Asp Phe Glu Asp Leu Tyr Thr Pro Val Asn Gly Ser Ile Val Ile
 245 250 255
 Val Arg Ala Gly Lys Ile Thr Phe Ala Glu Lys Val Ala Asn Ala Glu
 260 265 270
 Ser Leu Asn Ala Ile Gly Val Leu Ile Tyr Met Asp Gln Thr Lys Phe
 275 280 285
 Pro Ile Val Asn Ala Glu Leu Ser Phe Phe Gly His Ala His Leu Gly
 290 295 300
 Thr Gly Asp Pro Tyr Thr Pro Gly Phe Pro Ser Phe Asn His Thr Gln
 305 310 315 320
 Phe Pro Pro Ser Arg Ser Ser Gly Leu Pro Asn Ile Pro Val Gln Thr
 325 330 335
 Ile Ser Arg Ala Ala Ala Glu Lys Leu Phe Gly Asn Met Glu Gly Asp
 340 345 350
 Cys Pro Ser Asp Trp Lys Thr Asp Ser Thr Cys Arg Met Val Thr Ser
 355 360 365
 Glu Ser Lys Asn Val Lys Leu Thr Val Ser Asn Val Leu Lys Glu Ile
 370 375 380
 Lys Ile Leu Asn Ile Phe Gly Val Ile Lys Gly Phe Val Glu Pro Asp
 385 390 395 400
 His Tyr Val Val Val Gly Ala Gln Arg Asp Ala Trp Gly Pro Gly Ala
 405 410 415
 Ala Lys Ser Gly Val Gly Thr Ala Leu Leu Leu Lys Leu Ala Gln Met
 420 425 430
 Phe Ser Asp Met Val Leu Lys Asp Gly Phe Gln Pro Ser Arg Ser Ile
 435 440 445
 Ile Phe Ala Ser Trp Ser Ala Gly Asp Phe Gly Ser Val Gly Ala Thr
 450 455 460
 Glu Trp Leu Glu Gly Tyr Leu Ser Ser Leu His Leu Lys Ala Phe Thr
 465 470 475 480
 Tyr Ile Asn Leu Asp Lys Ala Val Leu Gly Thr Ser Asn Phe Lys Val
 485 490 495
 Ser Ala Ser Pro Leu Leu Tyr Thr Leu Ile Glu Lys Thr Met Gln Asn
 500 505 510

Val Lys His Pro Val Thr Gly Gln Phe Leu Tyr Gln Asp Ser Asn Trp
 515 520 525
 Ala Ser Lys Val Glu Lys Leu Thr Leu Asp Asn Ala Ala Phe Pro Phe
 530 535 540
 Leu Ala Tyr Ser Gly Ile Pro Ala Val Ser Phe Cys Phe Cys Glu Asp
 545 550 555 560
 Thr Asp Tyr Pro Tyr Leu Gly Thr Thr Met Asp Thr Tyr Lys Glu Leu
 565 570 575
 Ile Glu Arg Ile Pro Glu Leu Asn Lys Val Ala Arg Ala Ala Glu
 580 585 590
 Val Ala Gly Gln Phe Val Ile Lys Leu Thr His Asp Val Glu Leu Asn
 595 600 605
 Leu Asp Tyr Glu Arg Tyr Asn Ser Gln Leu Leu Ser Phe Val Arg Asp
 610 615 620
 Leu Asn Gln Tyr Arg Ala Asp Ile Lys Glu Met Gly Leu Ser Leu Gln
 625 630 635 640
 Trp Leu Tyr Ser Ala Arg Gly Asp Phe Phe Arg Ala Thr Ser Arg Leu
 645 650 655
 Thr Thr Asp Phe Gly Asn Ala Glu Lys Thr Asp Arg Phe Val Met Lys
 660 665 670
 Lys Leu Asn Asp Arg Val Met Arg Val Glu Tyr His Phe Leu Ser Pro
 675 680 685
 Tyr Val Ser Pro Lys Glu Ser Pro Phe Arg His Val Phe Trp Gly Ser
 690 695 700
 Gly Ser His Thr Leu Pro Ala Leu Leu Glu Asn Leu Lys Leu Arg Lys
 705 710 715 720
 Gln Asn Asn Gly Ala Phe Asn Glu Thr Leu Phe Arg Asn Gln Leu Ala
 725 730 735
 Leu Ala Thr Trp Thr Ile Gln Gly Ala Ala Asn Ala Leu Ser Gly Asp
 740 745 750
 Val Trp Asp Ile Asp Asn Glu Phe
 755 760

<210> 505
 <211> 611
 <212> PRT
 <213> Homo sapiens
 <400> 505

Met Ala Ala Ser Ala Lys Lys Lys Asn Lys Lys Gly Lys Thr Ile Ser
 1 5 10 15
 Leu Thr Asp Phe Leu Ala Glu Asp Gly Gly Thr Gly Gly Gly Ser Thr
 20 25 30
 Tyr Val Ser Lys Pro Val Ser Trp Ala Asp Glu Thr Asp Asp Leu Glu
 35 40 45
 Gly Asp Val Ser Thr Thr Trp His Ser Asn Asp Asp Asp Val Tyr Arg
 50 55 60
 Ala Pro Pro Ile Asp Arg Ser Ile Leu Pro Thr Ala Pro Arg Ala Ala
 65 70 75 80
 Arg Glu Pro Asn Ile Asp Arg Ser Arg Leu Pro Lys Ser Pro Pro Tyr
 85 90 95
 Thr Ala Phe Leu Gly Asn Leu Pro Tyr Asp Val Thr Glu Glu Ser Ile
 100 105 110
 Lys Glu Phe Phe Arg Gly Leu Asn Ile Ser Ala Val Arg Leu Pro Arg
 115 120 125
 Glu Pro Ser Asn Pro Glu Arg Leu Lys Gly Phe Gly Tyr Ala Glu Phe
 130 135 140
 Glu Asp Leu Asp Ser Leu Leu Ser Ala Leu Ser Leu Asn Glu Glu Ser
 145 150 155 160
 Leu Gly Asn Arg Arg Ile Arg Val Asp Val Ala Asp Gln Ala Gln Asp
 165 170 175
 Lys Asp Arg Asp Asp Arg Ser Phe Gly Arg Asp Arg Asn Arg Asp Ser
 180 185 190
 Asp Lys Thr Asp Thr Asp Trp Arg Ala Arg Pro Ala Thr Asp Ser Phe
 195 200 205
 Asp Asp Tyr Pro Pro Arg Arg Gly Asp Asp Ser Phe Gly Asp Lys Tyr
 210 215 220
 Arg Asp Arg Tyr Asp Ser Asp Arg Tyr Arg Asp Gly Tyr Arg Asp Gly
 225 230 235 240
 Tyr Arg Asp Gly Pro Arg Arg Asp Met Asp Arg Tyr Gly Gly Arg Asp

245
 Arg Tyr Asp Asp Arg Gly Ser Arg Asp Tyr Asp Arg Gly Tyr Asp Ser
 260
 Arg Ile Gly Ser Gly Arg Arg Ala Phe Gly Ser Gly Tyr Arg Arg Asp
 275
 Asp Asp Tyr Arg Gly Gly Gly Asp Arg Tyr Glu Asp Arg Tyr Asp Arg
 290
 Arg Asp Asp Arg Ser Trp Ser Ser Arg Asp Asp Tyr Ser Arg Asp Asp
 305
 Tyr Arg Arg Asp Asp Arg Gly Pro Pro Gln Arg Pro Lys Leu Asn Leu
 325
 Lys Pro Arg Ser Thr Pro Glu Glu Asp Asp Ser Ser Ala Ser Thr Ser
 340
 Gln Ser Thr Arg Ala Ala Ser Ile Phe Gly Gly Ala Lys Pro Val Asp
 355
 Thr Ala Ala Arg Glu Arg Glu Val Glu Glu Arg Leu Gln Lys Glu Gln
 370
 Glu Lys Leu Gln Arg Gln Trp Asn Glu Pro Lys Leu Glu Arg Arg Pro
 385
 Arg Glu Arg His Pro Ser Trp Arg Ser Glu Glu Thr Gln Glu Arg Glu
 405
 Arg Ser Arg Thr Gly Ser Glu Ser Ser Gln Thr Gly Thr Ser Thr Thr
 420
 Ser Ser Arg Asn Ala Arg Arg Arg Glu Ser Glu Lys Ser Leu Glu Asn
 435
 Glu Thr Leu Asn Lys Glu Glu Asp Cys His Ser Pro Thr Ser Lys Pro
 450
 Pro Lys Pro Asp Gln Pro Leu Lys Val Met Pro Ala Pro Pro Pro Lys
 465
 Glu Asn Ala Trp Val Lys Arg Ser Ser Asn Pro Pro Ala Arg Ser Gln
 485
 Ser Ser Asp Thr Glu Gln Gln Ser Pro Thr Ser Gly Gly Gly Lys Val
 500
 Ala Pro Ala Gln Pro Ser Glu Glu Gly Pro Gly Arg Lys Asp Glu Asn
 515
 Lys Val Asp Gly Met Asn Ala Pro Lys Gly Gln Thr Gly Asn Ser Ser
 530
 Arg Gly Pro Gly Asp Gly Gly Asn Arg Asp His Trp Lys Glu Ser Asp
 545
 Arg Lys Asp Gly Lys Lys Asp Gln Asp Ser Arg Ser Ala Pro Glu Pro
 565
 Lys Lys Pro Glu Glu Asn Pro Ala Ser Lys Phe Ser Ser Ala Ser Lys
 580
 Tyr Ala Ala Leu Ser Val Asp Gly Glu Asp Glu Asn Glu Gly Glu Asp
 595
 Tyr Ala Glu
 610

<210> 506

<211> 379

<212> PRT

<213> Homo sapiens

<400> 506

Met Ala Ala Ala Ala Gln Gly Gly Gly Gly Gly Glu Pro Arg Arg
 1
 Thr Glu Gly Val Gly Pro Gly Val Pro Gly Glu Val Glu Met Val Lys
 20
 Gly Gln Pro Phe Asp Val Gly Pro Arg Tyr Thr Gln Leu Gln Tyr Ile
 35
 Gly Glu Gly Ala Tyr Gly Met Val Ser Ser Ala Tyr Asp His Val Arg
 50
 Lys Thr Arg Val Ala Ile Lys Lys Ile Ser Pro Phe Glu His Gln Thr
 65
 Tyr Cys Gln Arg Thr Leu Arg Glu Ile Gln Ile Leu Leu Arg Phe Arg
 85
 His Glu Asn Val Ile Gly Ile Arg Asp Ile Leu Arg Ala Ser Thr Leu
 100
 Glu Ala Met Arg Asp Val Tyr Ile Val Gln Asp Leu Met Glu Thr Asp
 115
 120
 125

Leu Tyr Lys Leu Leu Lys Ser Gln Gln Leu Ser Asn Asp His Ile Cys
 130 135 140
 Tyr Phe Leu Tyr Gln Ile Leu Arg Gly Leu Lys Tyr Ile His Ser Ala
 145 150 155 160
 Asn Val Leu His Arg Asp Leu Lys Pro Ser Asn Leu Leu Ser Asn Thr
 165 170 175
 Thr Cys Asp Leu Lys Ile Cys Asp Phe Gly Leu Ala Arg Ile Ala Asp
 180 185 190
 Pro Glu His Asp His Thr Gly Phe Leu Thr Glu Tyr Val Ala Thr Arg
 195 200 205
 Trp Tyr Arg Ala Pro Glu Ile Met Leu Asn Ser Lys Gly Tyr Thr Lys
 210 215 220
 Ser Ile Asp Ile Trp Ser Val Gly Cys Ile Leu Ala Glu Met Leu Ser
 225 230 235 240
 Asn Arg Pro Ile Phe Pro Gly Lys His Tyr Leu Asp Gln Leu Asn His
 245 250 255
 Ile Leu Gly Ile Leu Gly Ser Pro Ser Gln Glu Asp Leu Asn Cys Ile
 260 265 270
 Ile Asn Met Lys Ala Arg Asn Tyr Leu Gln Ser Leu Pro Ser Lys Thr
 275 280 285
 Lys Val Ala Trp Ala Lys Leu Phe Pro Lys Ser Asp Ser Lys Ala Leu
 290 295 300
 Asp Leu Leu Asp Arg Met Leu Thr Phe Asn Pro Asn Lys Arg Ile Thr
 305 310 315 320
 Val Glu Glu Ala Leu Ala His Pro Tyr Leu Glu Gln Tyr Tyr Asp Pro
 325 330 335
 Thr Asp Glu Pro Val Ala Glu Glu Pro Phe Thr Phe Ala Met Glu Leu
 340 345 350
 Asp Asp Leu Pro Lys Glu Arg Leu Lys Glu Leu Ile Phe Gln Glu Thr
 355 360 365
 Ala Arg Phe Gln Pro Gly Val Leu Glu Ala Pro
 370 375

<210> 507

<211> 351

<212> PRT

<213> Homo sapiens

<400> 507

Met Thr Trp Ser Ala Thr Ala Arg Gly Ala His Gln Pro Asp Asn Thr
 1 5 10 15
 Ala Phe Thr Gln Gln Arg Leu Pro Ala Trp Gln Pro Leu Leu Ser Ala
 20 25 30
 Ser Ile Ala Leu Pro Leu Phe Phe Cys Ala Gly Leu Ala Phe Ile Gly
 35 40 45
 Leu Gly Leu Gly Leu Tyr Tyr Ser Ser Asn Gly Ile Lys Glu Leu Glu
 50 55 60
 Tyr Asp Tyr Thr Gly Asp Pro Gly Thr Gly Asn Cys Ser Val Cys Ala
 65 70 75 80
 Ala Ala Gly Gln Gly Arg Ala Leu Pro Pro Pro Cys Ser Cys Ala Trp
 85 90 95
 Tyr Phe Ser Leu Pro Glu Leu Phe Gln Gly Pro Val Tyr Leu Tyr Tyr
 100 105 110
 Glu Leu Thr Asn Phe Tyr Gln Asn Asn Arg Arg Tyr Gly Val Ser Arg
 115 120 125
 Asp Asp Ala Gln Leu Ser Gly Leu Pro Ser Ala Leu Arg His Pro Val
 130 135 140
 Asn Glu Cys Ala Pro Tyr Gln Arg Ser Ala Ala Gly Leu Pro Ile Ala
 145 150 155 160
 Pro Cys Gly Ala Ile Ala Asn Ser Leu Phe Asn Asp Ser Phe Ser Leu
 165 170 175
 Trp His Gln Arg Gln Pro Gly Gly Pro Tyr Val Glu Val Pro Leu Asp
 180 185 190
 Arg Ser Gly Ile Ala Trp Trp Thr Asp Tyr His Val Lys Phe Arg Asn
 195 200 205
 Pro Pro Leu Val Asn Gly Ser Leu Ala Leu Ala Phe Gln Gly Thr Ala
 210 215 220
 Pro Pro Pro Asn Trp Arg Arg Pro Val Tyr Glu Leu Ser Pro Asp Pro
 225 230 235 240
 Asn Asn Thr Gly Phe Ile Asn Gln Asp Phe Val Val Trp Met Arg Thr

245
 Ala Ala Leu Pro Thr Phe Arg Lys Leu 250
 260 Tyr Ala Arg Ile Arg Gln Gly
 Asn Tyr Ser Ala Gly Leu Pro Arg Gly Ala Tyr Arg Val Asn Ile Thr
 275
 Tyr Asn Tyr Pro Val Arg Ala Phe Gly Gly His Lys Leu Leu Ile Phe
 290 295 300
 Ser Ser Ile Ser Trp Met Gly Gly Lys Asn Pro Phe Leu Gly Ile Ala
 305 310 315 320
 Tyr Leu Val Val Gly Ser Leu Cys Ile Leu Thr Gly Phe Val Met Leu
 325 330 335
 Val Val Tyr Ile Arg Tyr Gln Asp Gln Asp Asp Asp Asp Glu Glu
 340 345 350

<210> 508
 <211> 524
 <212> PRT
 <213> Homo sapiens
 <400> 508

Met Gly Lys Pro Ala Arg Lys Gly Cys Glu Trp Lys Arg Phe Leu Lys
 1 5 10 15
 Asn Asn Trp Val Leu Leu Ser Thr Val Ala Ala Val Val Leu Gly Ile
 20 25 30
 Thr Thr Gly Val Leu Val Arg Glu His Ser Asn Leu Ser Thr Leu Glu
 35 40 45
 Lys Phe Tyr Phe Ala Phe Pro Gly Glu Ile Leu Met Arg Met Leu Lys
 50 55 60
 Leu Ile Ile Leu Pro Leu Ile Ile Ser Ser Met Ile Thr Gly Val Ala
 65 70 75 80
 Ala Leu Asp Ser Asn Val Ser Gly Lys Ile Gly Val Arg Ala Val Val
 85 90 95
 Tyr Tyr Phe Cys Thr Thr Leu Ile Ala Val Ile Leu Gly Ile Val Leu
 100 105 110
 Val Val Ser Ile Lys Pro Gly Val Thr Gln Lys Val Gly Glu Ile Ala
 115 120 125
 Arg Thr Gly Ser Thr Pro Glu Val Ser Thr Val Asp Ala Met Leu Asp
 130 135 140
 Leu Ile Arg Asn Met Phe Pro Glu Asn Leu Val Gln Ala Cys Phe Gln
 145 150 155 160
 Gln Tyr Lys Thr Lys Arg Glu Glu Val Lys Pro Pro Ser Asp Pro Glu
 165 170 175
 Met Asn Met Thr Glu Glu Ser Phe Thr Ala Val Met Thr Thr Ala Ile
 180 185 190
 Ser Lys Asn Lys Thr Lys Glu Tyr Lys Ile Val Gly Met Tyr Ser Asp
 195 200 205
 Gly Ile Asn Val Leu Gly Leu Ile Val Phe Cys Leu Val Phe Gly Leu
 210 215 220
 Val Ile Gly Lys Met Gly Glu Lys Gly Gln Ile Leu Val Asp Phe Phe
 225 230 235 240
 Asn Ala Leu Ser Asp Ala Thr Met Lys Ile Val Gln Ile Ile Met Cys
 245 250 255
 Tyr Met Pro Leu Gly Ile Leu Phe Leu Ile Ala Gly Lys Ile Ile Glu
 260 265 270
 Val Glu Asp Trp Glu Ile Phe Arg Lys Leu Gly Leu Tyr Met Ala Thr
 275 280 285
 Val Leu Thr Gly Leu Ala Ile His Ser Ile Val Ile Leu Pro Leu Ile
 290 295 300
 Tyr Phe Ile Val Val Arg Lys Asn Pro Phe Arg Phe Ala Met Gly Met
 305 310 315 320
 Ala Gln Ala Leu Leu Thr Ala Leu Met Ile Ser Ser Ser Ser Ala Thr
 325 330 335
 Leu Pro Val Thr Phe Arg Cys Ala Glu Glu Asn Asn Gln Val Asp Lys
 340 345 350
 Arg Ile Thr Arg Phe Val Leu Pro Val Gly Ala Thr Ile Asn Met Asp
 355 360 365
 Gly Thr Ala Leu Tyr Glu Ala Val Ala Ala Val Phe Ile Ala Gln Leu
 370 375 380
 Asn Asp Leu Asp Leu Gly Ile Gly Gln Ile Ile Thr Ile Ser Ile Thr
 385 390 395 400

Ala Thr Ser Ala Ser Ile Gly Ala Ala Gly Val Pro Gln Ala Gly Leu
 405 410 415
 Val Thr Met Val Ile Val Leu Ser Ala Val Gly Leu Pro Ala Glu Asp
 420 425 430
 Val Thr Leu Ile Ile Ala Val Asp Trp Leu Leu Asp Arg Phe Arg Thr
 435 440 445
 Met Val Asn Val Leu Gly Asp Ala Phe Gly Thr Gly Ile Val Glu Lys
 450 455 460
 Leu Ser Lys Lys Glu Leu Glu Gln Met Asp Val Ser Ser Glu Val Asn
 465 470 475 480
 Ile Val Asn Pro Phe Ala Leu Glu Ser Thr Ile Leu Asp Asn Glu Asp
 485 490 495
 Ser Asp Thr Lys Lys Ser Tyr Val Asn Gly Gly Phe Ala Val Asp Lys
 500 505 510
 Ser Asp Thr Ile Ser Phe Thr Gln Thr Ser Gln Phe
 515 520

<210> 509

<211> 416

<212> PRT

<213> Homo sapiens

<400> 509

Met Ala His Ser Pro Val Ala Val Gln Val Pro Gly Met Gln Asn Asn
 1 5 10 15
 Ile Ala Asp Pro Glu Glu Leu Phe Thr Lys Leu Glu Arg Ile Gly Lys
 20 25 30
 Gly Ser Phe Gly Glu Val Phe Lys Gly Ile Asp Asn Arg Thr Gln Gln
 35 40 45
 Val Val Ala Ile Lys Ile Ile Asp Leu Glu Glu Ala Glu Asp Glu Ile
 50 55 60
 Glu Asp Ile Gln Gln Glu Ile Thr Val Leu Ser Gln Cys Asp Ser Ser
 65 70 75 80
 Tyr Val Thr Lys Tyr Tyr Gly Ser Tyr Leu Lys Gly Ser Lys Leu Trp
 85 90 95
 Ile Ile Met Glu Tyr Leu Gly Gly Gly Ser Ala Leu Asp Leu Leu Arg
 100 105 110
 Ala Gly Pro Phe Asp Glu Phe Gln Ile Ala Thr Met Leu Lys Glu Ile
 115 120 125
 Leu Lys Gly Leu Asp Tyr Leu His Ser Glu Lys Lys Ile His Arg Asp
 130 135 140
 Ile Lys Ala Ala Asn Val Leu Leu Ser Glu Gln Gly Asp Val Lys Leu
 145 150 155 160
 Ala Asp Phe Gly Val Ala Gly Gln Leu Thr Asp Thr Gln Ile Lys Arg
 165 170 175
 Asn Thr Phe Val Gly Thr Pro Phe Trp Met Ala Pro Glu Val Ile Gln
 180 185 190
 Gln Ser Ala Tyr Asp Ser Lys Ala Asp Ile Trp Ser Leu Gly Ile Thr
 195 200 205
 Ala Ile Glu Leu Ala Lys Gly Glu Pro Pro Asn Ser Asp Met His Pro
 210 215 220
 Met Arg Val Leu Phe Leu Ile Pro Lys Asn Asn Pro Pro Thr Leu Val
 225 230 235 240
 Gly Asp Phe Thr Lys Ser Phe Lys Glu Phe Ile Asp Ala Cys Leu Asn
 245 250 255
 Lys Asp Pro Ser Phe Arg Pro Thr Ala Lys Glu Leu Leu Lys His Lys
 260 265 270
 Phe Ile Val Lys Asn Ser Lys Lys Thr Ser Tyr Leu Thr Glu Leu Ile
 275 280 285
 Asp Arg Phe Lys Arg Trp Lys Ala Glu Gly His Ser Asp Asp Glu Ser
 290 295 300
 Asp Ser Glu Gly Ser Asp Ser Glu Ser Thr Ser Arg Glu Asn Asn Thr
 305 310 315 320
 His Pro Glu Trp Ser Phe Thr Thr Val Arg Lys Lys Pro Asp Pro Lys
 325 330 335
 Lys Val Gln Asn Gly Ala Glu Gln Asp Leu Val Gln Thr Leu Ser Cys
 340 345 350
 Leu Ser Met Ile Ile Thr Pro Ala Phe Ala Glu Leu Lys Gln Gln Asp
 355 360 365
 Glu Asn Asn Ala Ser Arg Asn Gln Ala Ile Glu Glu Leu Glu Lys Ser

370	375	380
Ile Ala Val Ala Glu Ala Ala Cys Pro Gly	Ile Thr Asp Lys Met Val	
385	390	395
Lys Lys Leu Ile Glu Lys Phe Gln Lys Cys	Ser Ala Asp Glu Ser Pro	400
	405	410
		415

<210> 510

<211> 285

<212> PRT

<213> Homo sapiens

<400> 510

Met Val Met Arg Pro Leu Trp Ser Leu Leu Leu Trp Glu Ala Leu Leu	
1	5
Pro Ile Thr Val Thr Gly Ala Gln Val Leu Ser Lys Val Gly Gly Ser	10
	20
Val Leu Leu Val Ala Ala Arg Pro Pro Gly Phe Gln Val Arg Glu Ala	25
	30
Ile Trp Arg Ser Leu Trp Pro Ser Glu Glu Leu Leu Ala Thr Phe Phe	35
	40
Arg Gly Ser Leu Glu Thr Leu Tyr His Ser Arg Phe Leu Gly Arg Ala	45
	50
Gln Leu His Ser Asn Leu Ser Leu Glu Leu Gly Pro Leu Glu Ser Gly	55
	60
Asp Ser Gly Asn Phe Ser Val Leu Met Val Asp Thr Arg Gly Gln Pro	65
	70
Trp Thr Gln Thr Leu Gln Leu Lys Val Tyr Asp Ala Val Pro Arg Pro	75
	80
Val Val Gln Val Phe Ile Ala Val Glu Arg Asp Ala Gln Pro Ser Lys	85
	90
Thr Cys Gln Val Phe Leu Ser Cys Trp Ala Pro Asn Ile Ser Glu Ile	95
	100
Thr Tyr Ser Trp Arg Arg Glu Thr Thr Met Asp Phe Gly Met Glu Pro	105
	110
His Ser Leu Phe Thr Asp Gly Gln Val Leu Ser Ile Ser Leu Gly Pro	115
	120
Gly Asp Arg Asp Val Ala Tyr Ser Cys Ile Val Ser Asn Pro Val Ser	125
	130
Trp Asp Leu Ala Thr Val Thr Pro Trp Asp Ser Cys His His Glu Ala	135
	140
Ala Pro Gly Lys Ala Ser Tyr Lys Asp Val Leu Val Val Val Pro	145
	150
Val Ser Leu Leu Leu Met Leu Val Thr Leu Phe Ser Ala Trp His Trp	155
	160
Cys Pro Cys Ser Gly Lys Lys Lys Lys Asp Val His Ala Asp Arg Val	165
	170
Gly Pro Glu Thr Glu Asn Pro Leu Val Gln Asp Leu Pro	175
	180
	185
	190
	195
	200
	205
	210
	215
	220
	225
	230
	235
	240
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